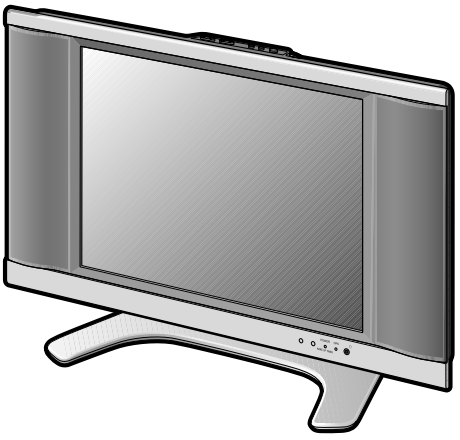
SHARP

SERVICE MANUAL

S45H7LC20B9US



LCD COLOR TELEVISION

LC-20B8U-S
LC-20B9U-S

MODELS **LC-20B9U-SM**

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

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SHARP CORPORATION

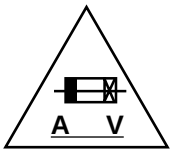
This document has been published to be used for after sales service only.
The contents are subject to change without notice.

IMPORTANT SERVICE SAFETY PRECAUTION

■ **Service work should be performed only by qualified service technicians who are thoroughly familiar with all safety checks and the servicing guidelines which follow:**

WARNING

1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC power before servicing.



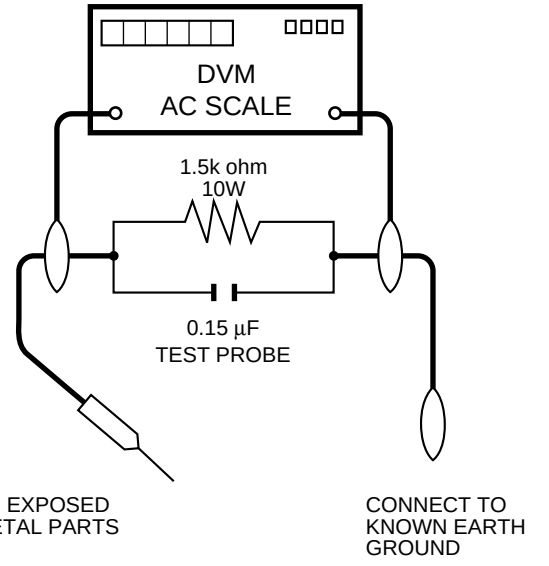
CAUTION: FOR CONTINUED PROTECTION AGAINST A RISK OF FIRE REPLACE ONLY WITH SAME TYPE F6701 (6.3A, 250V) AND F7701 (3.15A, 250V)FUSE.

BEFORE RETURNING THE RECEIVER (Fire & Shock Hazard)

Before returning the receiver to the user, perform the following safety checks:

1. Inspect all lead dress to make certain that leads are not pinched, and check that hardware is not lodged between the chassis and other metal parts in the receiver.
2. Inspect all protective devices such as non-metallic control knobs, insulation materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacitor networks, mechanical insulators, etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.

- Plug the AC cord directly into a 110~240 volt AC outlet, and connect the DC power cable into the receiver's DC jack. (Do not use an isolation transformer for this test).
- Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15µF capacitor in series with all exposed metal cabinet parts and a known earth ground, such as electrical conduit or electrical ground connected to an earth ground.
- Use an AC voltmeter having with 5000 ohm per volt, or higher, sensitivity or measure the AC voltage drop across the resistor.
- Connect the resistor connection to all exposed metal parts having a return to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.
  All checks must be repeated with the AC cord plug connection reversed. (If necessary, a nonpolarized adaptor plug must be used only for the purpose of completing these checks.)
  Any reading of 0.75V peak (this corresponds to 0.5 mA. peak AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the monitor to the owner.



SAFETY NOTICE

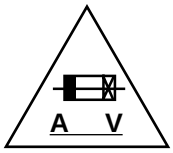
Many electrical and mechanical parts in LCD television have special safety-related characteristics.
These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage, etc.
Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by "⚠" and shaded areas in the ***Replacement Parts Lists*** and ***Schematic Diagrams***.
For continued protection, replacement parts must be identical to those used in the original circuit.
The use of a substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire or other hazards.

PRECAUTIONS A PRENDRE LORS DE LA REPARATION

■ **Ne peut effectuer la réparation qu' un technicien spécialisé qui s'est parfaitement accoutumé à toute vérification de sécurité et aux conseils suivants.**

AVERTISSEMENT

1. N'entreprendre aucune modification de tout circuit. C'est dangereux.
2. Débrancher le récepteur avant toute réparation.



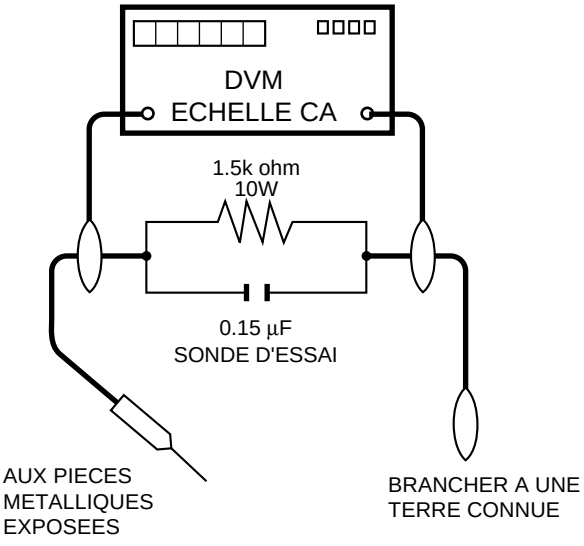
PRECAUTION: POUR LA PROTECTION CONTINUE CONTRE LES RISQUES D'INCENDIE, REMPLACER LE FUSIBLE PAR UN FUSIBLE DE MEME TYPE F6701 (6.3A, 250V), F7701 (3.15A, 250V).

VERIFICATIONS CONTRE L'INCEN-DIE ET LE CHOC ELECTRIQUE

Avant de rendre le récepteur à l'utilisateur, effectuer les vérifications suivantes.

1. Inspecter tous les faisceaux de câbles pour s'assurer que les fils ne soient pas pincés ou qu'un outil ne soit pas placé entre le châssis et les autres pièces métalliques du récepteur.
2. Inspecter tous les dispositifs de protection comme les boutons de commande non-métalliques, les isolants, le dos du coffret, les couvercles ou blindages de réglage et de compartiment, les réseaux de résistance-capacité, les isolateurs mécaniques, etc.
3. S'assurer qu'il n'y ait pas de danger d'électrocution en vérifiant la fuite de courant, de la facon suivante:

- Brancher le cordon d'alimentation directem-ent à une prise de courant de 110-240V. (Ne pas utiliser de transformateur d'isolation pour cet essai).
- A l'aide de deux fils à pinces, brancher une résistance de 1.5kΩ 10 watts en parallèle avec un condensateur de 0.15µF en série avec toutes les pièces métalliques exposées du coffret et une terre connue comme une conduite électrique ou une prise de terre branchée à la terre.
- Utiliser un voltmètre CA d'une sensibilité d'au moins 5000Ω/V pour mesurer la chute de tension en travers de la résistance.
- Toucher avec la sonde d'essai les pièces métalliques exposées qui présentent une voie de retour au châssis (antenne, coffret métallique, tête des vis, arbres de commande et des boutons, écusson, etc.) et mesurer la chute de tension CA en-travers de la résistance. Toutes les vérifications doivent être refaites après avoir inversé la fiche du cordon d'alimentation. (Si nécessaire, une prise d'adpatation non polarisée peut être utilisée dans le but de terminer ces vérifications.)
  Tous les courants mesurés ne doivent pas dépasser 0.5 mA.
  Dans le cas contraire, il y a une possibilité de choc électrique qui doit être supprimée avant de rendre le récepteur au client.



AVIS POUR LA SECURITE

De nombreuses pièces, électriques et mécaniques, dans les téléviseurs présentent des caractéristiques spéciales relatives à la sécurité, qui ne sont souvent pas évidentes à vue. Le degré de protection ne peut pas être nécessairement augmentée en utilisant des pièces de remplacement étalonnées pour haute tension, puissance, etc.
Les pièces de remplacement qui présentent ces caractéristiques sont identifiées dans ce manuel; les pièces électriques qui présentent ces particularités sont identifiées par la marque " ⚠ " et hachurées dans la liste des pièces de remplacement et les diagrammes schématiques.
Pour assurer la protection, ces pièces doivent être identiques à celles utilisées dans le circuit d'origine. L'utilisation de pièces qui n'ont pas les mêmes caractéristiques que les pièces recommandées par l'usine, indiquées dans ce manuel, peut provoquer des électrocutions, incendies, radiations X ou autres accidents.

Precautions for using lead-free solder

1 Employing lead-free solder

"All PWBs" of this model employs lead-free solder. The LF symbol indicates lead-free solder, and is attached on the PWBs and service manuals. The alphabetical character following LF shows the type of lead-free solder.

Example:

Indicates lead-free solder of tin, silver and copper.

2 Using lead-free wire solder

When fixing the PWB soldered with the lead-free solder, apply lead-free wire solder. Repairing with conventional lead wire solder may cause damage or accident due to cracks.

As the melting point of lead-free solder (Sn-Ag-Cu) is higher than the lead wire solder by 40°C, we recommend you to use a dedicated soldering bit, if you are not familiar with how to obtain lead-free wire solder or soldering bit, contact our service station or service branch in your area.

3 Soldering

As the melting point of lead-free solder (Sn-Ag-Cu) is about 220°C which is higher than the conventional lead solder by 40°C, and as it has poor solder wettability, you may be apt to keep the soldering bit in contact with the PWB for extended period of time. However, Since the land may be peeled off or the maximum heat-resistance temperature of parts may be exceeded, remove the bit from the PWB as soon as you confirm the steady soldering condition.

Lead-free solder contains more tin, and the end of the soldering bit may be easily corroded. Make sure to turn on and off the power of the bit as required.

If a different type of solder stays on the tip of the soldering bit, it is alloyed with lead-free solder. Clean the bit after every use of it.

When the tip of the soldering bit is blackened during use, file it with steel wool or fine sandpaper.

Be careful when replacing parts with polarity indication on the PWB silk.

Lead-free wire solder for servicing

Part No.	★	Description		Code
ZHNDAi123250E	J	ϕ0.3mm	250g(1roll)	BL
ZHNDAi126500E	J	ϕ0.6mm	500g(1roll)	BK
ZHNDAi12801KE	J	ϕ1.0mm	1kg(1roll)	BM

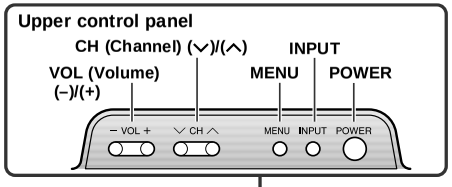
SPECIFICATIONS

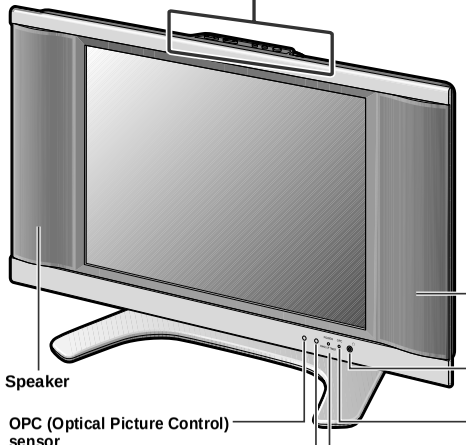
Items / Model		LC-20B8U/LC-20B9U
LCD panel		20" Advanced Super View & BLACK TFT LCD
Number of dots		2,359,296 dots XGA
Video color systems		N358, N443, PAL, PAL-M, PAL-N, SECAM, PAL-60
TV function	TV Standard (CCIR)	NTSC/PAL-M/PAL-N
	TV Tuning System	PLL 181 ch.
	STEREO	MTS+SAP
	CATV	125 ch.
Y/C FILTER		3D Y/C FILTER
Brightness		480 cd/m^2
Viewing angles		H: 170° V: 170°
Audio amplifier		2.1 W × 2
Speakers		ø2.0 in. (ø5.0 cm), 2 pcs.
Terminals	INPUT1	AUDIO-IN, COMPONENT-IN
	INPUT2	AUDIO-IN, COMPONENT-IN
	INPUT3	AUDIO-IN, VIDEO-IN, S-VIDEO-IN
	INPUT4/OUTPUT	AUDIO-IN, VIDEO-IN/AUDIO-OUT, VIDEO-OUT
	INPUT5	PC Connector: 15-pin mini D-sub PC AUDIO: Mini-jack for stereo (ø3.5 mm)
	Antenna	F-Type
	Headphone	Mini-jack for stereo (ø3.5 mm)
OSD language		English/Spanish/French
Power supply		AC 110-240V, 50/60Hz
Power consumption		81 W (0.6 W standby): AC 120V
Weight		19.4 lbs. (8.8 kg), w/o accessories

■As a part of policy of continuous improvement, SHARP reserves the right to make design and specification changes for the LCD TV set improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

Part Names of the Main Unit

Controls



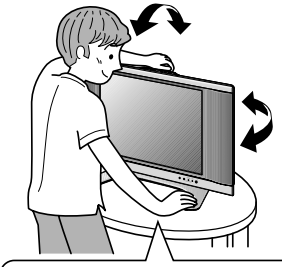


Headphone jack (🎧)
Plug the headphone mini-plug into the headphone jack located on the front of the main unit.

OPC (Optical Picture Control) indicator
The OPC indicator lights up green when "OPC" is set to "ON".

POWER/WAKE UP TIMER indicator
POWER/WAKE UP TIMER indicator lights up green when the power is on, and red when in the standby mode (the indicator will not light when the main power is off), and orange when the wake-up timer is set (the indicator will light when in the standby mode).

■ How to adjust the angle



Tilt the display by grabbing onto the carrying handle while securely holding down the stand with your other hand.

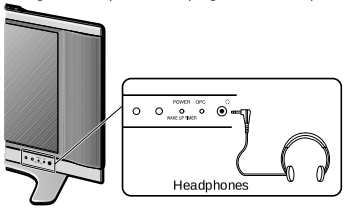
To change the vertical angle of the LCD TV set, tilt the screen up to 2.5 degrees forward or 10 degrees backward. The LCD TV set can also be rotated up to 12 degrees to right and left. Please adjust the angle so that the LCD TV set can be watched most comfortably.

NOTE

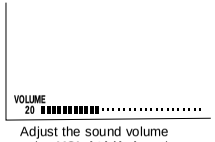
- **INPUT**, **CH (∨)/(∧)**, **VOL (–)/(+)** and **MENU** on the main unit have the same functions as the same buttons on the remote control. Fundamentally, this operation manual provides a description based on operation using the remote control.

Listening with Headphones

■ Plug the headphone mini-plug into the headphone jack located on the front of the main unit.



■ On-screen display

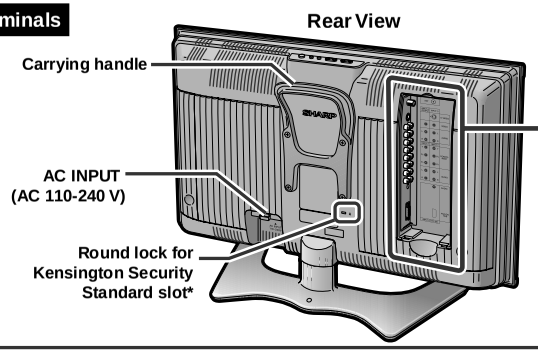


Adjust the sound volume using **VOL (+)/(–)** on the remote control.

NOTE

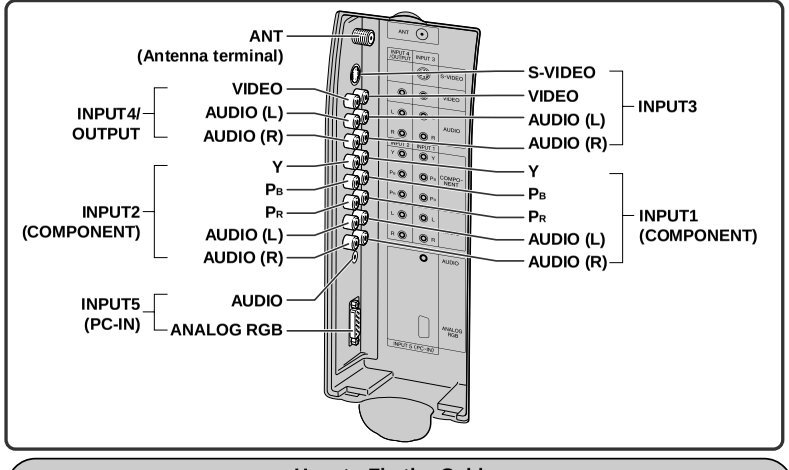
- Headphones are not included in the supplied accessories.
- No sound is heard from the main unit speakers when a headphone mini-plug is connected into the headphone jack.
- Do not set the volume at a high level. Hearing experts advise against extended listening at high volume levels.

Terminals



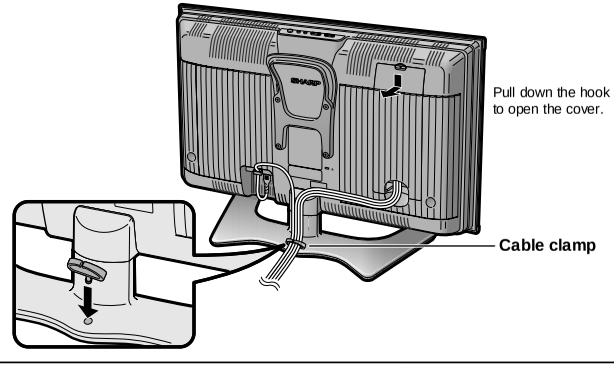
*** Using the Kensington Lock**

- This LCD TV set has a Kensington Security Standard slot for use with a Kensington MicroSaver Security System. Refer to the information that came with the system for instructions on how to use it to secure the LCD TV set.

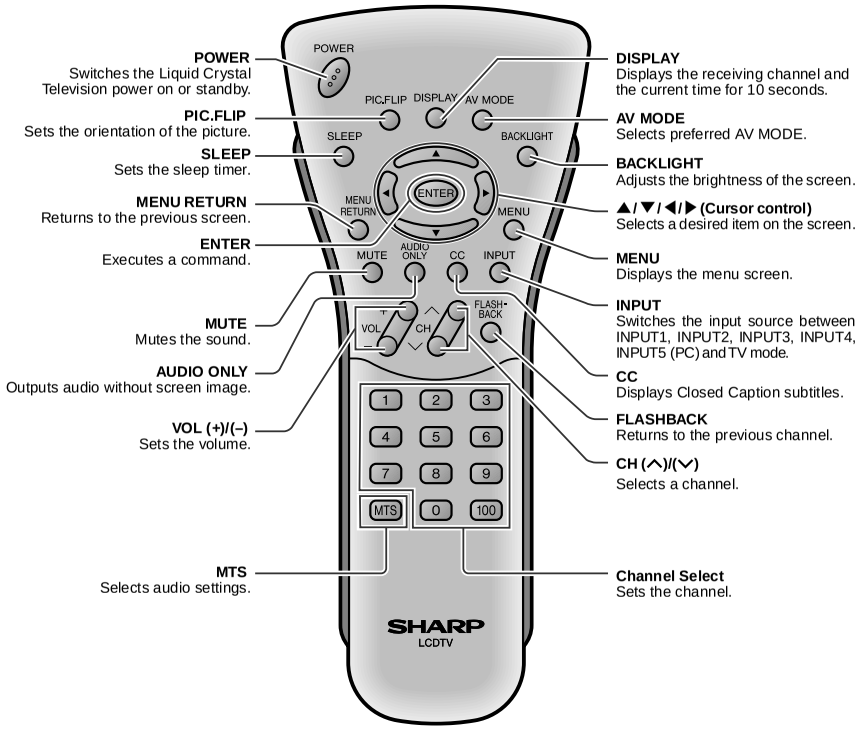


How to Fix the Cables

- Secure cables and cords with the supplied cable clamp so that they do not get caught when mounting the cover.



Part Names of the Remote Control



POWER
Switches the Liquid Crystal Television power on or standby.

PIC.FLIP
Sets the orientation of the picture.

SLEEP
Sets the sleep timer.

MENU RETURN
Returns to the previous screen.

ENTER
Executes a command.

MUTE
Mutes the sound.

AUDIO ONLY
Outputs audio without screen image.

VOL (+)/(–)
Sets the volume.

MTS
Selects audio settings.

DISPLAY
Displays the receiving channel and the current time for 10 seconds.

AV MODE
Selects preferred AV MODE.

BACKLIGHT
Adjusts the brightness of the screen.

▲/▼/◀/▶ (Cursor control)
Selects a desired item on the screen.

MENU
Displays the menu screen.

INPUT
Switches the input source between INPUT1, INPUT2, INPUT3, INPUT4, INPUT5 (PC) and TV mode.

CC
Displays Closed Caption subtitles.

FLASHBACK
Returns to the previous channel.

CH (^)/(v)
Selects a channel.

Channel Select
Sets the channel.

TV Signals in Your Region

This product is factory set to comply with the TV broadcasting system in the United States. For Brazil, Argentina and Uruguay, set the color system according to the country before using this product by following the table below.

Country	TV broadcasting system	Factory setting of color system		User setting
		TV	Video	TV/Video
U.S.A.	Color: NTSC TV ch: US ch	NTSC (N358) US ch	NTSC (N358) US ch	Not required or N/A
Canada, Mexico, Latin America	Color: NTSC TV ch: US ch	NTSC (N358) US ch	NTSC (N358) US ch	Not required or N/A
Brazil	Color: PAL-M TV ch: US ch	NTSC (N358) US ch	NTSC (N358) US ch	Set color system to PAL-M
Argentina, Uruguay	Color: PAL-N TV ch: US ch	NTSC (N358) US ch	NTSC (N358) US ch	Set color system to PAL-N

NOTE

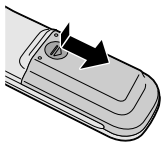
- The 3 Dimensional Y/C separation circuit* only works when the color system is set to N358 in TV mode and Video mode.
  * The 3 Dimensional Y/C separation circuit is used to remove flickering and color bleeding.
  * The 3 Dimensional Y/C separation circuit does not function when S-VIDEO or COMPONENT signals are input.

Preparation

Installing Batteries in the Remote Control

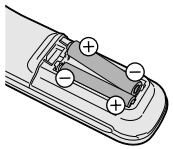
Before using the LCD TV set for the first time, install the two "AAA" size batteries supplied in the remote control. When the batteries become depleted and the remote control fails to operate, replace the batteries with new "AAA" size batteries.

1 Open the battery cover.



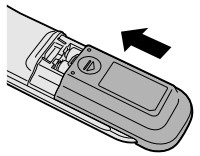
■ Slide the cover while pressing the (▾) part.

2 Insert two "AAA" size batteries.



■ Place batteries with their terminals corresponding to the (+) and (–) indications in the battery compartment.

3 Close the battery cover.



■ Engaging the lower claw with the remote control, close the cover.

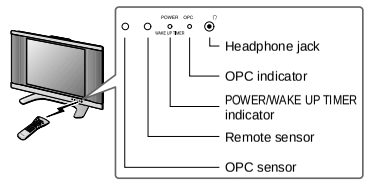
⚠ Caution!

Precautions regarding batteries

■ Improper use of batteries can result in a leakage of chemicals and/or explosion. Be sure to follow the instructions below.
- Place batteries with their terminals corresponding to the (+) and (–) indications.
- Different types of batteries have different characteristics. Do not mix batteries of different types.
- Do not mix old and new batteries. Mixing old and new batteries can shorten the life of new batteries and/or cause old batteries to leak chemicals.
- Remove batteries as soon as they are depleted. Chemicals that leak from batteries can cause a rash. If chemical leakage is found, wipe it off with a cloth.
- The batteries supplied with the LCD TV set may have a shorter operating time due to storage conditions.
- If the remote control is not to be used for a long period of time, remove the batteries from the remote control.

Using the Remote Control

■ Use the remote control by pointing it towards the remote sensor window of the main unit. Objects between the remote control and sensor window may prevent proper operation.

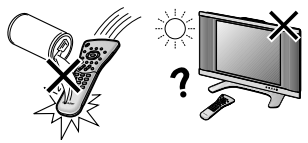


Cautions regarding use of the remote control

■ Do not apply shock to the remote control. In addition, do not expose the remote control to liquids, and do not place it in an area with high humidity.

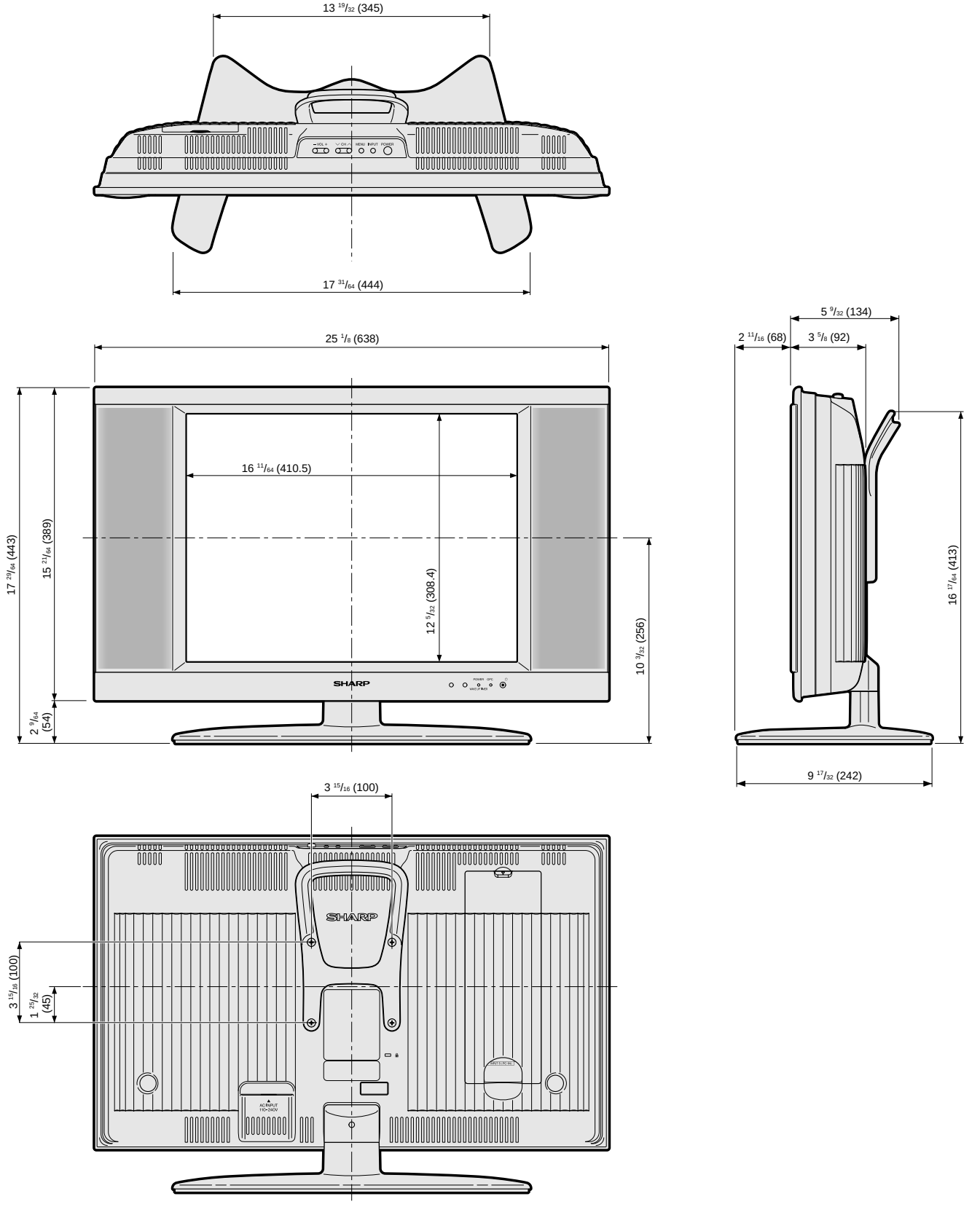
■ Do not install or place the remote control in direct sunlight. The heat may cause deformation of the unit.

■ The remote control may not work properly if the remote sensor window is in direct sunlight or strong lighting. In such a case, change the angle of the lighting or main unit, or operate the remote control closer to the remote sensor window.



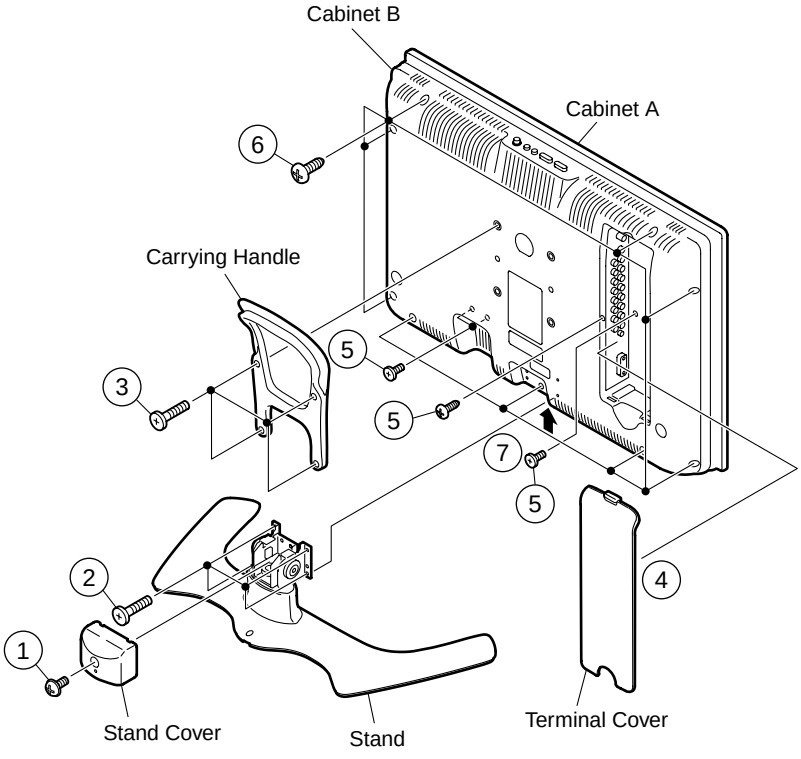
DIMENSIONS

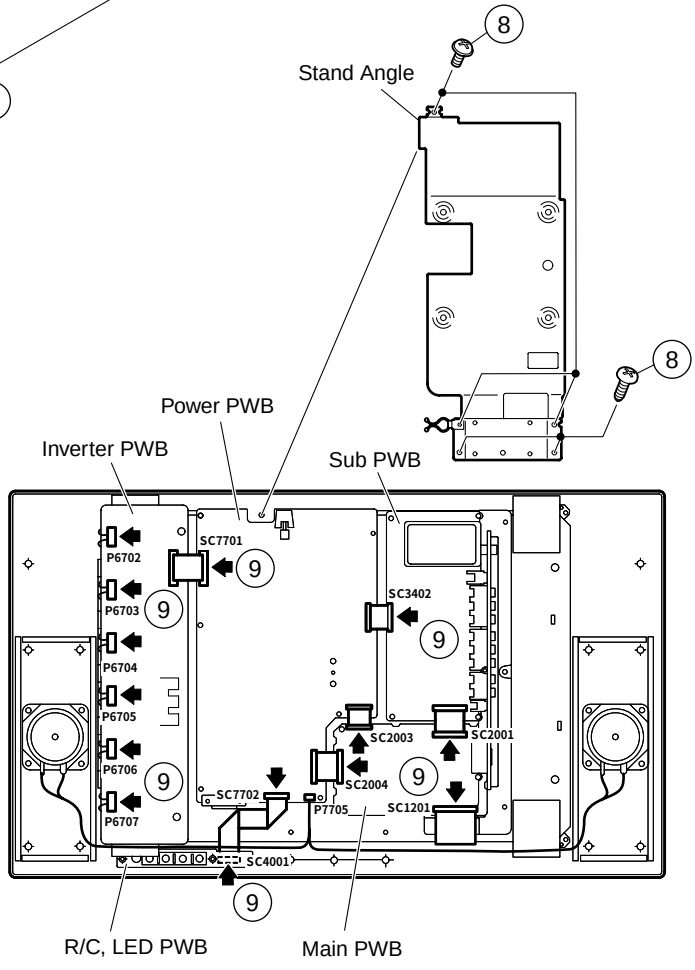
Unit: inch (mm)



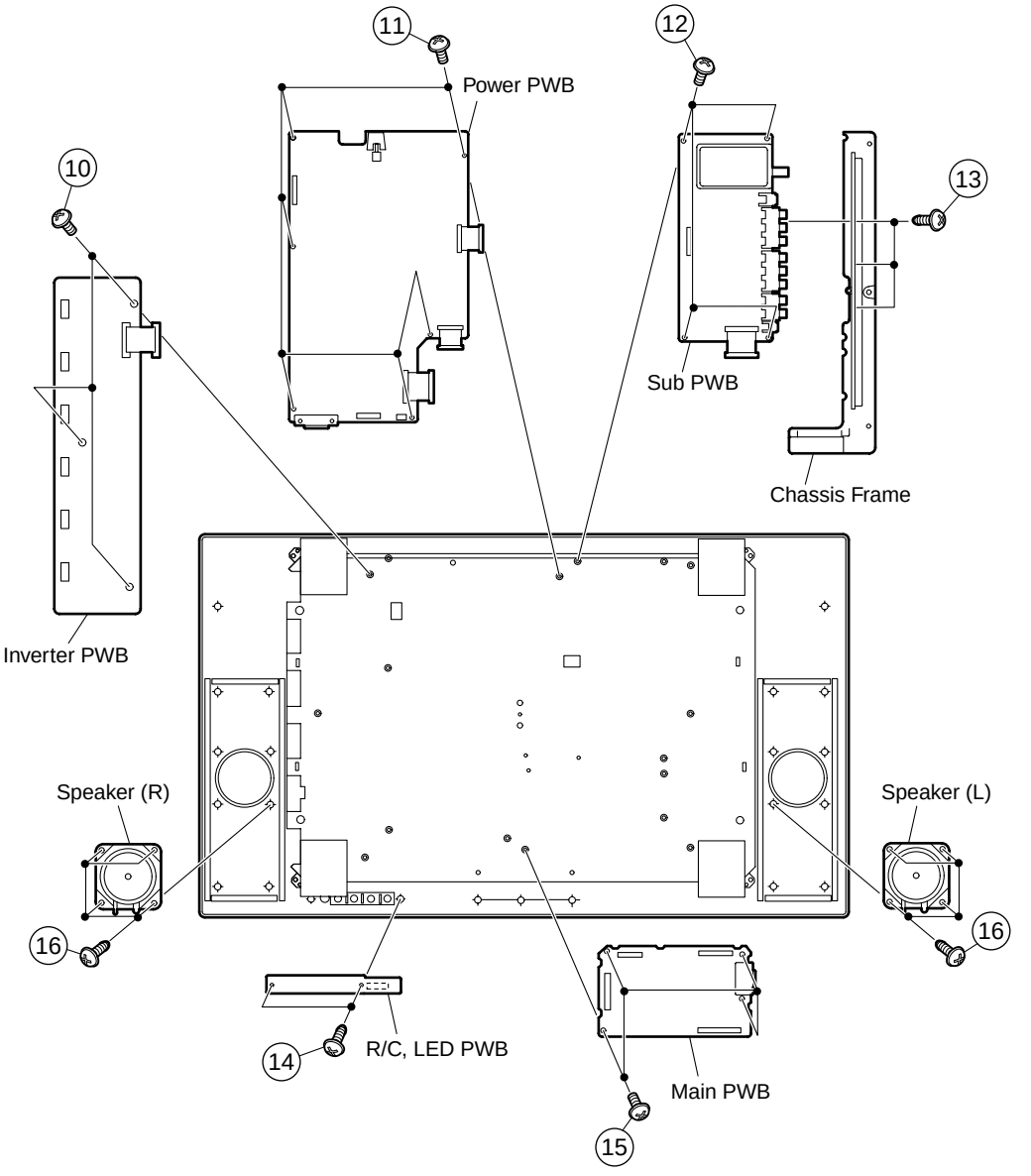
REMOVING OF MAJOR PARTS

1. Remove the stand cover fixing screw (1 pc.).
2. Remove the stand fixing screws (4 pcs.).
3. Remove the carrying handle fixing screws (4 pcs.).
4. Remove the terminal cover.
5. Remove the terminal screws (4 pcs.).
6. Remove the cabinet B fixing screws (9 pcs.).
7. Remove the cabinet B after opening from the direction of an arrow.
8. Remove the stand angle fixing screws (5 pcs.).
9. Disconnect all the connectors from all the PWBs.



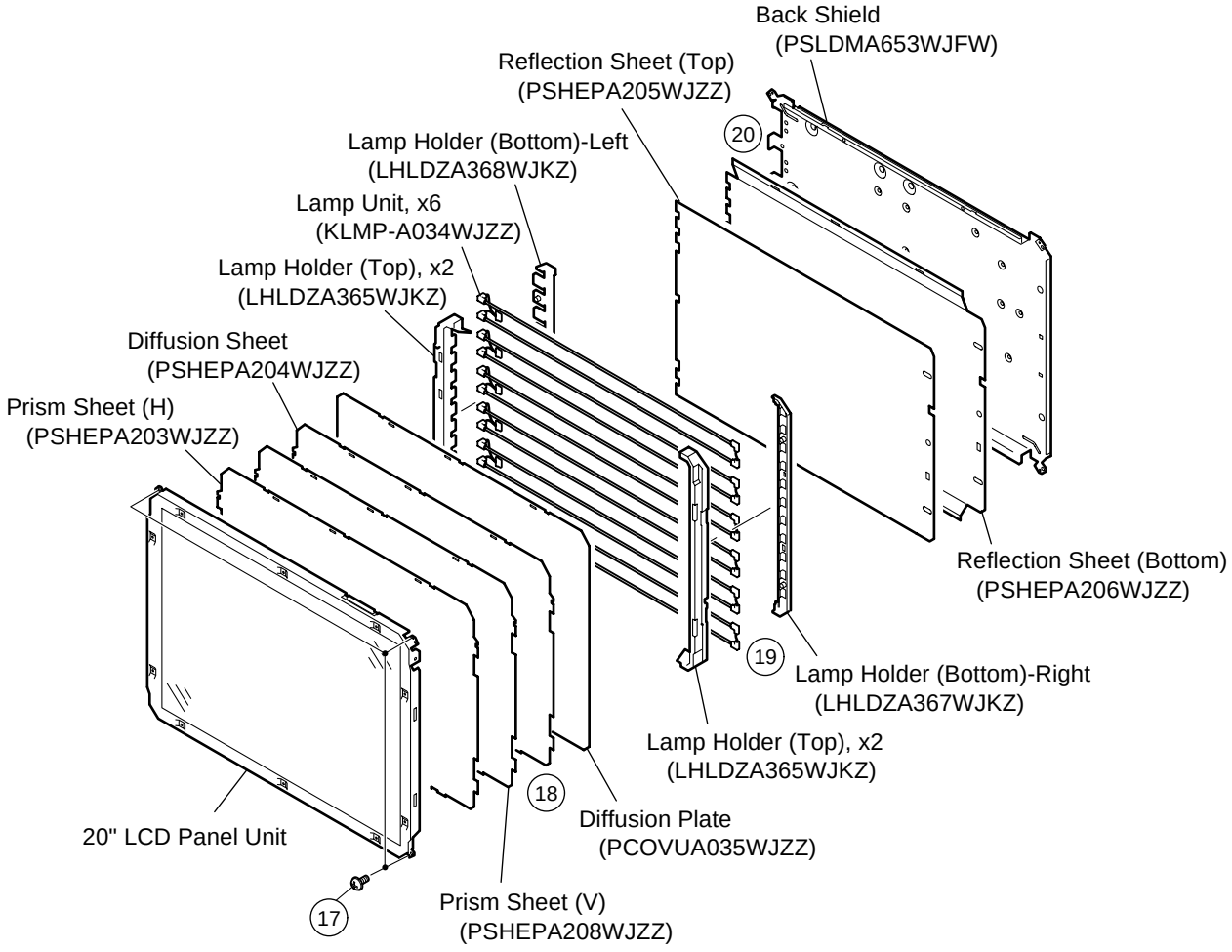


10. Remove the inverter PWB fixing screws (3 pcs.).
11. Remove the power PWB fixing screws (6 pcs.).
12. Remove the sub PWB fixing screws (4 pcs.).
13. Remove the chassis frame fixing screws (3 pcs.).
14. Remove the R/C, LED PWB fixing screws (2 pcs.).
15. Remove the main PWB fixing screws (4 pcs.).
16. Remove the 4 lock screws each from the right and left speakers and take out both the speakers.



- Precautions in handling the LCD panel
  1. Handle it in a clean room. (above 50% humidity)
  2. The worker must wear an earth band.
  3. Be careful not to drop, vibrate and shock the panel.
  4. Use an ionizer. (within 30 cm)

17. Remove the three lock screws from the LCD panel, and detach the LCD panel unit.
18. Remove the prism sheet (H), (V), diffusion sheet and diffusion plate.
19. Remove the lamp unit from the lamp holder (top). Then detach the (bottom)-left and (bottom)-right lamp holders.
20. Remove the reflection sheets (top) and (bottom) from the back shield.



●Precautions in servicing the side-B (backside) of the main PWB unit

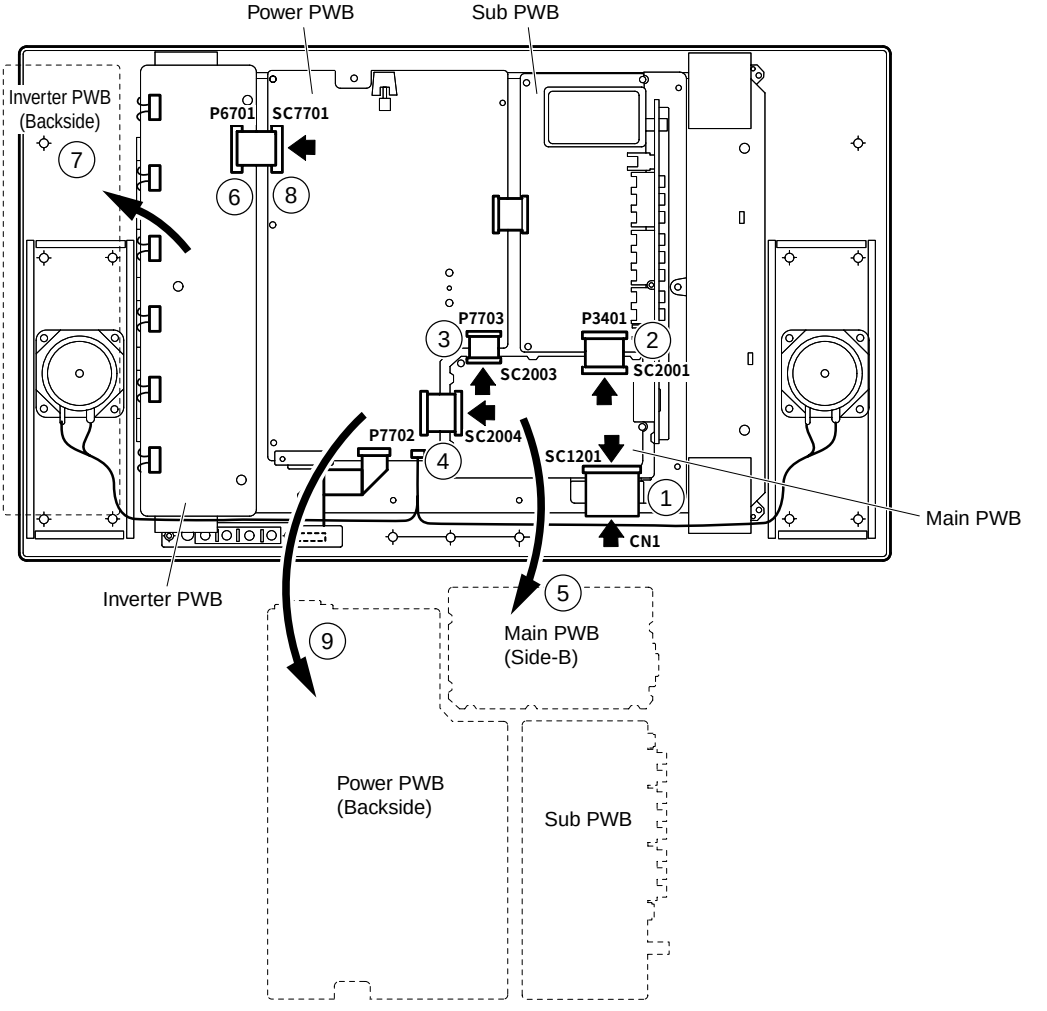
1. Disconnect the FFC for connection between the main PWB (SC1201) and LCD panel (CN1), and then connect the service-specific extension FFC (flat cable) (QCNW-C458WJQZ).
2. Disconnect the SC2001 side of the lead from between the main PWB (SC2001) and the sub PWB (P3401), and then connect the service-specific extension cord (QCNW-D402WJQZ).
3. Disconnect the SC2003 side of the lead from between the main PWB (SC2003) and the power PWB (P7703), and then connect the service-specific extension extension cord (QCNW-C461WJQZ).
4. Disconnect the SC2004 side of the lead from between the main PWB (SC2004) and the power PWB (P7702), and then connect the service-specific extension cord (QCNW-D402WJQZ).
5. Remove the lock screws (4pcs.) from the main PWB, detach the PWB from the chassis frame, and then turn it over to service.

●Precautions in servicing the Chip Parts side (backside) of the inverter PWB unit

6. Disconnect the SC7701 side of the lead from between the power PWB (SC7701) and the inverter PWB (P6701), and then connect the service-specific extension cord (QCNW-C460WJQZ).
7. Remove the lock screws from the inverter PWB and then turn it over to service.

●Precautions in servicing the Chip Parts side (backside) of the power PWB unit (main/sub PWB)

8. Disconnect the SC7701 side of the lead from between the power PWB (SC7701) and the inverter PWB (P6701), and then connect the service-specific extension cord (QCNW-C460WJQZ).
9. Remove the PWB fixing screws (main unit: 4 pcs., sub unit: 4 pcs., power unit: 6 pcs.)



Step	Part No.	Description
1	QCNW-C458WJQZ	Extension Cable 80-pin Main (SC1201)-LCD Panel (CN1)
2	QCNW-D402WJQZ	Extension Cable 23-pin Main (SC2001)-Sub (P3401)
3	QCNW-C461WJQZ	Extension Cable 15-pin Main (SC2003)-Power (P7703)
4	QCNW-D402WJQZ	Extension Cable 23-pin Main (SC2004)-Power (P7702)
6, 8	QCNW-C460WJQZ	Extension Cable 19-pin Power (SC7701)-Inverter (P6701)

ADJUSTING PROCEDURE OF EACH SECTION

1. Preparations before adjustment

(1) Keep the AC power cable directly plugged in a wall outlet.
AC110V~240V

[1] Adjustment procedures
1-1. Adjusting the checker
Power on (initialization) → Setting the model number and screen size
1-2. Finishing process adjustments
Assembling → Power on → Adjustment process mode (bus connector) → AD converter level, common bias, TAMP and white balance (cut-off and gain) adjustments

[2] Entering the checker mode/adjustment process mode
2-1. Calling the checker mode
* Keep KEY-5 (pin (82) of microprocessor) at "L" level and turn on the power.

KEY-4	KEY-5	Mode shift
H	H	Normal mode (Fresh data written and saved on EEPROM)
L	H	Shift to adjustment process mode
H	L	Operation with master ROM settings in the checker mode (EEPROM still brand-new after the checker mode)
L	L	EEPROM initialized and microprocessor's master settings written (process adjustment values not yet written)

2-2. Calling the adjustment process mode
There are two ways to call this mode.
* Keep KEY-4 (pin (81) of microprocessor) at "L" level and turn on the power.
* For servicing:① Hold down the "INPUT" and "VOL (–)" keys at once, and turn on the power switch. ("K" appears at the top left onscreen to indicate that the checker mode is on.) → ② Press the "CH (∨)" and "VOL (–)" keys at once. (The adjustment process mode screen shows up.) ····· To quit the mode, turn off the power (using the power switch on the set or the remote controller).

[3] Key operation
■Basic operation
* Using the "CH (∧)/(∨)" keys, select a receiving channel.
* Using the "INPUT" key, select an input.
* Using the "cursor up/down keys, select an adjustment item. (When the "cursor down" key is pressed at the bottom item of a page, the top item on the next page will be selected. When the "cursor up" key is pressed at the top item of a page, the bottom item on the previous page will be selected.)
* Using the "VOL (+)/(–)" or "cursor right/left" keys, adjust the selected item.
* Press the "MENU" key, and the next item will be selected. (When the "MENU" key is pressed at the bottom item of a page, the top item on the next page will be selected.)

■Hierarchical shift
* Press the "ENTER" key on any item other than I2C DATA on Page 9, the setting page of the item will show up.
* To quit the setting page, press the "FLASHBACK" key.

[4] Initialization

4-1. Connect both pins (81) and (82) of IC2001 (microprocessor) to GND, and turn on the power.

4-2. Make sure the model number "A628" is selected. *Note: This setting cannot be changed.

4-3. Make sure "20" (inches) is selected for the screen size. *Note: This setting cannot be changed.

(Onscreen display of adjustment process menu page 1)

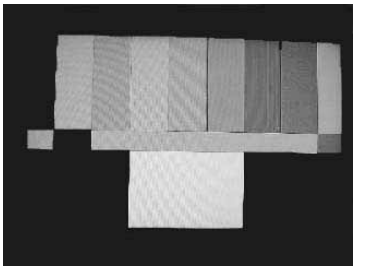
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
0	1																										
1		▶	M	O	D	E	L																A	6	2	8	
2			I	N	C	H		S	I	Z	E														2	0	
3			E	R	R	O	R		N	O		R	E	S	E	T										0	
4			P	U	B	L	I	C		M	O	D	E											O	F	F	
5			V	-	C	H	I	P																		1	
6			E	X	T		C	O	N	T	R	O	L											O	F	F	
7																											
8																											

[5] Adjustments

5-1. AD converter level adjustment

① D3 input

1) Feed only the Y component of D3 75% color bar signal.
   Equipment used: LEADER LT446
   Signal name: COLOR BAR 75%
   Setting: 01: 1920 x 1080 / 60i
   H: 33.72 kHz, V: 29.97 Hz
2) Turn on the AUTO GAIN-OFFSET1 item on adjustment process page 7.



② PC input

1) Feed the VGA white 0% signal.
2) Turn on the AUTO OFFSET2 item on adjustment process page 8.
3) Feed the VGA white 100% signal.
4) Turn on the AUTO GAIN2 item on adjustment process page 8.

5-2. Common bias adjustment

1) Adjust the "COM BIAS" setting on adjustment process page 2 so that flickering gets to minimum. With the setting changed, the flicker check built-in test pattern will show up.

5-3. TAMP adjustment

1) Receive the 75% standard color bar signal in the TV input mode.
2) If the "YDATA" reading on adjustment process page 2 is not within the range in the table below, readjust the "NTSC TAMP" item on the same page and make sure the "YDATA" reading is as specified.
   * Note that the setting range may be different from model to model.
3) Then add 6 to the "NTSC TAMP" setting and enter this value for "PAL-M TAMP" and "PAL-N TAMP".

Model	LC-20B8U	LC-20B9U
Setting	155-158	155-158

Reference
(Onscreen display of adjustment process menu page 2)

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
0	2																										
1		▶	C	O	M		B	I	A	S												4	5	0			
2			T	A	M	P		L														1	5	5			
3			Y	D	A	T	A															1	5	7			
4			T	A	M	P		H														1	5	8			
5			N	T	S	C		T	A	M	P												8	5			
6			P	A	L	-	M		T	A	M	P											9	1			
7			P	A	L	-	N		T	A	M	P											9	1			
8																											

Y Data
(White 75%)

5-4. White balance adjustment

1) Adjustment procedure (Call the AV input mode with INPUT3 or INPUT4.)
Adjust the RGB CUTOFF2 setting for the 40% white level, and the RGB-GAIN setting for the white 80% level.
(1) Adjustment
[Input signal] White 80% (191 gradations) and white 40% (92 gradations) signals
[Adjustment value] RGB CUTOFF2 and RGB-GAIN settings on adjustment process page 3

		Adjustment spec.	Inspection spec.	
White 80%	x=0.291	±0.006	±0.012	Radius from center point
	y=0.300	±0.006	±0.012	Radius from center point
				(Reference brightness: 300 cd/m^2)
White 40%	x=0.276	±0.006	±0.012	Radius from center point
	y=0.282	±0.006	±0.012	Radius from center point
				(Reference brightness: 50 cd/m^2)

Cut-off (RGB CUTOFF2): Fix the G setting at 0. Vary the R and B settings. Adjustable range ±30.
Gain (RGB-GAIN): Reduce the settings of the two stronger colors. Adjustable range 0 to -70.
(The values are based on the Minolta CA-210.)

[6] Factory settings

6-1. Hold down the "INPUT" and "VOL (–)" keys on the set at once, and turn on the power. Hold down the "CH (∧)" and "VOL (+)" keys at once. ("SETTING COMPLETE" appears on the screen.)
*Note: Immediately after the factory settings have been made, turn off the power switch.
(The next time the power is turned on, the set gets started in the EZ SETUP mode. An extra key-in just after the factory setting may cause the set to malfunction.)

SETTING COMPLETE

6-2. Intial value of factory settings

						Setting ranges	Initial values (TV)	(INPUT1)	(INPUT2)	(INPUT3)	(INPUT4)
MENU	PICTURE	AV MODE				STANDARD/DYNAMIC/DYNAMIC(FIXED)/MOVIE/GAME	DYNAMIC	DYNAMIC	DYNAMIC	DYNAMIC	DYNAMIC
							(Except PC)	(PC)			
		OPC				ON/OFF	OFF	OFF			
		BACKLIGHT				BRIGHT/NORMAL/DARK/VARIABLE	VARIABLE	VARIABLE			
							(STANDARD)	(DYNAMIC)	(DYNAMIC (FIXED))	(MOVIE)	(GAME)	(PC)
						1 (DARK) ~ 9 (NORMAL) ~ 17 (BRIGHT)	17	17	17	7	9	17(BRIGHT)
		CONTRAST				0 ~ 60	30	40	40	30	30	–
		BRIGHTNESS				-30 ~ +30	0	0	0	0	0	–
		COLOR				-30 ~ +30	0	+5	+5	0	0	–
		TINT				-30 ~ +30	0	0	0	0	0	–
		SHARPNESS				-10 ~ +10	0	0	0	0	0	–
							(Except PC)	(PC)			
		ADVANCED	COLOR TEMP.			USER/HIGH/MIDDLE/LOW	MIDDLE	MIDDLE			
			RED			-30 ~ +30	0	0			
			GREEN			-30 ~ +30	0	0			
			BLUE			-30 ~ +30	0	0			
			I/P SETTING			INTERLACE/PROGRESSIVE	PROGRESSIVE				
			NOISE CLEAN			ON/OFF	OFF				
			FILM MODE			ON/OFF	OFF				
			QUICK SHOOT			ON/OFF	ON				
			RESET			YES/NO	NO	Always select "NO" to move to the setting screen.			
		RESET				YES/NO	NO	Always select "NO" to move to the setting screen.			
	AUDIO	TREBLE				-10 ~ +10	0				
		BASS				-10 ~ +10	0				
		BALANCE				-10(L) ~ +10 (R)	0				
		PC SOUND SELECT				INPUT1~4/INPUT5 (PC)/TV	INPUT5 (PC)				
		RESET				YES/NO	NO	Always select "NO" to move to the setting screen.			
	SETUP	CH-SETTING	EZ-SETUP			YES/NO	YES				
				LANGUAGE		ENGLISH/ESPANOL/FRANCAIS	ENGLISH				
				CH SETTING		ON/OFF	ON				
				AUTO CLOCK		ON/OFF	ON				
				START		YES/NO	YES				
			AIR/CABLE			AIR/CABLE	AIR				
			CH SEARCH			–	–				
			CH MEMORY			–	–				
		MTS				STEREO/SAP/MONO	STEREO				
		CLOCK	SET			AUTO/MANUAL	AUTO				
				AUTO		AUTO/[2]~[69] or [1]~[125]	AUTO				
				MANUAL	DST	ON/OFF	OFF				
					TIME	12 : 00AM~11 : 59PM	12 : 00AM	The clock setting is yet to be made. Follow the display at left to move to the MANUAL CLOCK setting screen.			
			TIME DISPLAY			ON/OFF	ON				
		INPUT4 IN/OUT				IN/OUT○/OUT×	IN				
		V-CHIP BLOCK	SECRET No.			4-DIGIT ENTRY	CLEAR				
			MPAA	G		(NONE)/BLOCK	NONE				
				PG		(NONE)/BLOCK	NONE				
				PG-13		(NONE)/BLOCK	NONE				
				R		(NONE)/BLOCK	NONE				
				NC-17		(NONE)/BLOCK	NONE				
				X		(NONE)/BLOCK	NONE				
			TV GUIDELINES	TV-Y		(NONE)/BLOCK	NONE				
				TV-Y7		(NONE)/BLOCK	NONE				
				TV-G		(NONE)/BLOCK	NONE				
				TV-PG		(NONE)/BLOCK	NONE				
				TV-14		(NONE)/BLOCK	NONE				
				TV-MA		(NONE)/BLOCK	NONE				
				BLOCK CONTENT	D	(BLANK)/BLOCK	BLANK	(UN BLOCK)			
					L	(BLANK)/BLOCK	BLANK	(UN BLOCK)			
					S	(BLANK)/BLOCK	BLANK	(UN BLOCK)			
					V	(BLANK)/BLOCK	BLANK	(UN BLOCK)			
					FV	(BLANK)/BLOCK	BLANK	(UN BLOCK)			
			CAN.ENGLISH RATINGS	C		(NONE)/BLOCK	NONE				
				C8+			NONE				
				G			NONE				
				PG			NONE				
				14+			NONE				
				18+			NONE				
			CAN.FRENCH RATINGS	G			NONE				
				8 ans+			NONE				
				13 ans+			NONE				
				16 ans+			NONE				
				18 ans+			NONE				
			STATUS			ON/OFF	OFF				
		CLOSED CAPTION				OFF/CC1/CC2/T1/T2	OFF				
							(TV)	(INPUT3)	(INPUT4)		
		COLOR SYSTEM				AUTO/N358/N443/PAL/PAL-M/PAL-N/SECAM/PAL60 (* N358/PAL-M/PAL-N IN TV MODE)	N358	AUTO	AUTO		
		PC SETTING	INPUT SIGNAL			1024×768 (60Hz)/800×600(60Hz)/ 800×600(56Hz)/640×480(60Hz)	1024x768 (60Hz)				
			FINE SYNC.	H-POS.		-30 ~ +30	0				
				V-POS.		-15 ~ +15	0				
				CLOCK		-15 ~ +15	0				
				PHASE		-15 ~ +15	0				
				RESET		YES/NO	NO	Always select "NO" to move to the setting screen.			
		LANGUAGE				ENGLISH/ESPANOL/FRANCAIS	ENGLISH				
	OPTION	VIEW MODE					(TV)	(INPUT1)	(INPUT2)	(INPUT3)	(INPUT4)
						4 : 3/16 : 9/ZOOM/STRETCH	4 : 3	4 : 3	4 : 3	4 : 3	4 : 3
		AUDIO ONLY				ON/OFF	OFF				
		BLUE SCREEN				ON/OFF	OFF				
		SLEEP TIMER				OFF/30/60/90/120/150MIN	OFF (CLEAR)	Always select "OFF" to move to the setting screen.			
		WAKE UP TIMER	TIMER			ON/OFF	OFF				
			TIME			12 : 00AM~11 : 59PM	12 : 00AM				
			CHANNEL			CH1~125/INPUT1~INPUT4	CH2				
			VOL.			0~60	20				
		NO SIGNAL OFF				ENABLE/DISABLE	DISABLE				
		NO OPERATION OFF				ENABLE/DISABLE	DISABLE				
		POWER MANAGEMENT				ON/OFF	OFF				
		PICTURE FLIP				NORMAL/MIRROR/ROTATE/UPSIDE DOWN	NORMAL				

(Items not on the menu)	Initial values
EZ SETUP AUTO START	ON
LAST CHANNEL	2ch
LAST TV/INPUT	TV
FLASH BACK	2ch
SKIP DATA_CATV	ALL SKIP
SKIP DATA_AIR	ALL SKIP
VOLUME	20
LINE OUT LEVEL (AT VAO)	0
EDS CH (FOR AUTO)	NOT ESTABLISHED

HOTEL MODE	POWER ON FIXED	VARIABLE
	MAXIMUM VOLUME	60
	VOLUME FIXED	VARIABLE
	REMOTE CONTROL	RESPOND
	USER CONTROL	RESPOND
	MENU BUTTON	RESPOND
	ON SCREEN DISPLAY	YES
	START MODE	NORMAL
	INPUT MODE FIXED	VARIABLE

LIST OF THE ADJUSTMENT PROCESS MODE MENU

For calling the adjustment process mode and keying in this mode, refer back to "ADJUSTING PROCEDURE OF EACH SECTION".

DEFAULT CHART OF ADJUSTMENT PROCESS 1ST HIERARCHICAL ITEMS

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)
BASIC SETTING				
1	MODEL	A628	MODEL NAME SELECTION	CANNOT BE CHANGED.
	INCH SIZE	20	SCREEN SIZE SELECT (20-INCH AND 13/15-INCH SETTINGS NOT SWITCHABLE IN CASE OF DIFFERENT SYSTEMS)	USED FOR INITIALIZATION, NOT MODIFIABLE FOR OTHER CASES. DATA FOR OTHER CASES. DATA REWRITE AND READJUSTMENT REQUIRED WHEN WHEN INITIALIZED.
	ERROR NO RESET	0	LAMP ERROR COUNT AND RESET	SEE THE LAMP ERROR DETECTION.
	PUBLIC MODE	OFF	HOTEL MODE SETTING	NOT USED
	V-CHIP	1	VCHIP LINE MUTE SETTING	NOT USED
	EXT CONTROL	OFF	BUS, UART OPEN	NOT USED
	ROM AND GAIBU VERSION NUMBERS DISPLAYED AT THE BOTTOM.			
VIDEO ADJUSTMENT				
2	COM BIAS	410 —	COMMON BIAS ADJUSTMENT	SEE THE ADJUSTMENT PROCEDURES.
	TAMP L	155	Y LOWER LIMIT SETTING AT TAMP ADJUSTMENT	NOT USED
	YDATA	—	DATA READ VALUE AT TAMP ADJUSTMENT	SEE THE ADJUSTMENT PROCEDURES.
	TAMP H	158	Y UPPER LIMIT SETTING AT TAMP ADJUSTMENT	NOT USED
	NTSC TAMP	90	TAMP ADJUSTMENT	SEE THE ADJUSTMENT PROCEDURES.
	PAL-M TAMP	96	TAMP ADJUSTMENT	SEE THE ADJUSTMENT PROCEDURES.
	PAL-N TAMP	96	TAMP ADJUSTMENT	SEE THE ADJUSTMENT PROCEDURES.
WHITE BALANCE ADJUSTMENT				
3	R CUTOFF2	0	RED CUT-OFF ADJUSTMENT 2	REFER TO METHOD OF ADJUSTMENT.
	G CUTOFF2	0	GREEN CUT-OFF ADJUSTMENT 2	REFER TO METHOD OF ADJUSTMENT.
	B CUTOFF2	0	BLUE CUT-OFF ADJUSTMENT 2	REFER TO METHOD OF ADJUSTMENT.
	R-GAIN	0	WHITE BALANCE ADJUSTMENT 2	REFER TO METHOD OF ADJUSTMENT.
	G-GAIN	0	WHITE BALANCE ADJUSTMENT 2	REFER TO METHOD OF ADJUSTMENT.
	B-GAIN	0	WHITE BALANCE ADJUSTMENT 2	REFER TO METHOD OF ADJUSTMENT.
	RGB GAMMA	1	RGB γ COEFFICIENT SETTING	NOT USED
1125I/750P AD ADJUSTMENT				
7	AD9883 DATA	0	AD9883 DATA WRITE AND READ	NOT USED
	AD9883 DATA	WAIT	WRITE AND READ EXECUTED	NOT USED
	AUTO GAIN-OFFSET1	OFF	AD9883 GAIN AND OFFSET AUTO ADJUSTMENT OFF/RUN	REFER TO METHOD OF ADJUSTMENT.
	AD R GAIN	140	1125I, 750P INPUT RED GAIN ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	AD G GAIN	140	1125I, 750P INPUT GREEN GAIN ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	AD B GAIN	140	1125I, 750P INPUT BLUE GAIN ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	AD R OFFSET	56	1125I, 750P INPUT RED OFFSET ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	AD G OFFSET	56	1125I, 750P INPUT GREEN OFFSET ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	AD B OFFSET	56	1125I, 750P INPUT BLUE OFFSET ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	RGTAR	A3	1125I, 750P INPUT RED GAIN ADJUSTMENT TARGET	NOT USED
	GGTAR	A3	1125I, 750P INPUT GREEN GAIN ADJUSTMENT TARGET	NOT USED
	BGTAR	A3	1125I, 750P INPUT BLUE GAIN ADJUSTMENT TARGET	NOT USED
	RGCAL	—	Y LEVEL, CHROMA CALCULATION DISPLAY	NOT USED
	GGCAL	—	Y LEVEL, CHROMA CALCULATION DISPLAY	NOT USED
	BGCAL	—	Y LEVEL, CHROMA CALCULATION DISPLAY	NOT USED
	ROCAL	—	CLAMP RANGE Y LEVEL, WHITE LEVEL CALCULATION DISPLAY	NOT USED
	GOCAL	—	CLAMP RANGE Y LEVEL, WHITE LEVEL CALCULATION DISPLAY	NOT USED
	BOCAL	—	CLAMP RANGE Y LEVEL, WHITE LEVEL CALCULATION DISPLAY	NOT USED

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)

PC AD ADJUSTMENT

8	AUTO GAIN2	OFF	AD9883 GAIN AUTO ADJUSTMENT OFF/RUN	REFER TO METHOD OF ADJUSTMENT.
	AUTO OFFSET2	OFF	AD9883 OFFSET AUTO ADJUSTMENT OFF/RUN	REFER TO METHOD OF ADJUSTMENT.
	PCAD R GAIN	100	PC INPUT RED GAIN ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	PCAD G GAIN	100	PC INPUT GREEN GAIN ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	PCAD B GAIN	100	PC INPUT BLUE GAIN ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	PCAD R OFFSET	56	PC INPUT RED OFFSET ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	PCAD G OFFSET	56	PC INPUT GREEN OFFSET ADJUSTMENT	REFER TO METHOD OF ADJUSTMENT.
	PCAD B OFFSET	56	PC INPUT BLUE OFFSET ADJUSTMENT	NOT USED
	RGTAR	E6	PC INPUT RED GAIN ADJUSTMENT TARGET	NOT USED
	GGTAR	E6	PC INPUT GREEN GAIN ADJUSTMENT TARGET	NOT USED
	BGTAR	E6	PC INPUT BLUE GAIN ADJUSTMENT TARGET	NOT USED
	RGCAL	—	Y LEVEL, CHROMA CALCULATION DISPLAY	NOT USED
	GGCAL	—	Y LEVEL, CHROMA CALCULATION DISPLAY	NOT USED
	BGCAL	—	Y LEVEL, CHROMA CALCULATION DISPLAY	NOT USED
	ROCAL	—	CLAMP RANGE Y LEVEL, WHITE LEVEL CALCULATION DISPLAY	NOT USED
	GOCAL	—	CLAMP RANGE Y LEVEL, WHITE LEVEL CALCULATION DISPLAY	NOT USED
	BOCAL	—	CLAMP RANGE Y LEVEL, WHITE LEVEL CALCULATION DISPLAY	NOT USED

TABLE OF VARIOUS SETTINGS

9	I2C DATA	0	I2C BUS CONTROL IC DATA WRITE AND READ	NOT USED
	I2C DATA	WAIT	WRITE AND READ EXECUTED	NOT USED
	SOUND	—	SHIFT TO THE SOUND ADJUSTMENT PAGE	USE ENTER KEY TO GO TO THE SOUND ADJUSTMENT PAGE.
	DVP	—	SHIFT TO THE DVP ADJUSTMENT PAGE	USE ENTER KEY TO GO TO THE TC ADJUSTMENT PAGE.
	TUNER	—	SHIFT TO THE TUNER ADJUSTMENT PAGE	USE ENTER KEY TO GO TO THE TUNER ADJUSTMENT PAGE.
	OTHERS	—	SHIFT TO THE OTHER ADJUSTMENT PAGE	USE ENTER KEY TO GO TO THE OTHER ADJUSTMENT PAGE.

AUDIO ADJUSTMENT PROCESS SPECIFICATIONS

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)

AUDIO ADJUSTMENT

SOUND1	VOLUME	20	SOUND VOLUME	NOT USED
	MSP DATA	0	AUDIO IC MSP DATA WRITE AND READ	NOT USED
	MSP DATA	WAIT	WRITE AND READ EXECUTED	NOT USED
	CARRIER MUTE	ON	AUDIO OUTPUT SETTING WITHOUT TV SYNC	NOT USED
	IGR THR	12D	IGR THRESH LEVEL	NOT USED

AUDIO ADJUSTMENT

SOUND2	PRESCALE SCART	27	PRE-SCALE SETTING (EXTERNAL INPUT)	NOT USED
	PRESCALE FM/AM-M	31	PRE-SCALE SETTING (TV)	NOT USED

AUDIO ADJUSTMENT

SOUND3	BAND1 MIN	TV	-0350	EQUALIZER SETTING (WITH TV INPUT)	NOT USED
		OTHER	-0350	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	NOT USED
	BAND1 CNT	TV	+0450	EQUALIZER SETTING (WITH TV INPUT)	NOT USED
		OTHER	+0450	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	NOT USED
	BABD1 MAX	TV	+1200	EQUALIZER SETTING (WITH TV INPUT)	NOT USED
		OTHER	+1200	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	NOT USED
	BAND2 MIN	TV	0000	EQUALIZER SETTING (WITH TV INPUT)	NOT USED
		OTHER	0000	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	NOT USED
	BAND2 CNT	TV	+0300	EQUALIZER SETTING (WITH TV INPUT)	NOT USED
		OTHER	+0300	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	NOT USED
	BABD2 MAX	TV	+0600	EQUALIZER SETTING (WITH TV INPUT)	NOT USED
		OTHER	+0600	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	NOT USED
	BAND3	TV	-0150	EQUALIZER SETTING (WITH TV INPUT)	NOT USED
		OTHER	-0150	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	NOT USED

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)

AUDIO ADJUSTMENT

SOUND4	BAND4 MIN	TV	-0150	EQUALIZER SETTING (WITH TV INPUT)	NOT USED
		OTHER	-0150	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	NOT USED
	BAND4 CNT	TV	+0150	EQUALIZER SETTING (WITH TV INPUT)	NOT USED
		OTHER	+0150	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	NOT USED
	BAND4 MAX	TV	+0450	EQUALIZER SETTING (WITH TV INPUT)	NOT USED
		OTHER	+0450	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	NOT USED
	BAND5 MIN	TV	-0500	EQUALIZER SETTING (WITH TV INPUT)	NOT USED
		OTHER	-0500	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	NOT USED
	BAND5 CNT	TV	+0300	EQUALIZER SETTING (WITH TV INPUT)	NOT USED
		OTHER	+0300	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	NOT USED
	BAND5 MAX	TV	+1100	EQUALIZER SETTING (WITH TV INPUT)	NOT USED
		OTHER	+1100	EQUALIZER SETTING (WITH OTHER INPUT THAN TV)	NOT USED

DVP ADJUSTMENT PROCESS ITEMS

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)
DVP1	DVP DATA 0000 F0 ------(----)	—	DVP-RELATED GENERAL-PURPOSE VARIABLE SETTINGS	NOT USED
	DVP TEST PATTERN	0	TEST PATTERN SELECT	SEE THE ADJUSTMENT PROCESS MODE TEST PATTERNS.
	VCDOFFSET	15	VERTICAL COUNT-DOWN MINIMUM OSCILLATION CYCLE	NOT USED
	VCDWINDOW	30	VERTICAL COUNT-DOWN SYNC RANGE	NOT USED
	READ TEMP ---.--°C	—	TEMPERATURE DATA READING DISPLAY	NOT USED
DVP3	N358 TV CONT	144	N358 IMAGE SETTING (TV)	NOT USED
	N358 AV CONT	144	N358 IMAGE SETTING (COMPOSITE, S VIDEO)	NOT USED
	N358 TV BRIGHT	122	N358 BRIGHTNESS SETTING (TV)	NOT USED
	N358 AV BRIGHT	122	N358 BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	N358 TV COLOR	52	N358 COLOR DENSITY SETTING (TV)	NOT USED
	N358 AV COLOR	52	N358 COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	N358 TV TINT	138	N358 TINT SETTING (TV)	NOT USED
	N358 AV TINT	138	N358 TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	N358 TV SHARP V	100	N358 V PICTURE QUALITY SETTING (TV)	NOT USED
	N358 AV SHARP V	100	N358 V PICTURE QUALITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	N358 TV SHARP H1	200	N358 H PICTURE QUALITY SETTING 1 (TV)	NOT USED
	N358 AV SHARP H1	200	N358 H PICTURE QUALITY SETTING 1 (COMPOSITE, S VIDEO)	NOT USED
	N358 TV SHARP H2	150	N358 H PICTURE QUALITY SETTING 2 (TV)	NOT USED
	N358 AV SHARP H2	160	N358 H PICTURE QUALITY SETTING 2 (COMPOSITE, S VIDEO)	NOT USED
DVP4	N443 AV CONT	144	N443 IMAGE SETTING (COMPOSITE, S VIDEO)	NOT USED
	N443 AV BRIGHT	122	N443 BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	N443 AV COLOR	52	N443 COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	N443 AV TINT	138	N443 TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	N443 AV SHARP V	100	N443 V PICTURE QUALITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	N443 AV SHARP H1	200	N443 H PICTURE QUALITY SETTING 1 (COMPOSITE, S VIDEO)	NOT USED
	N443 AV SHARP H2	160	N443 H PICTURE QUALITY SETTING 2 (COMPOSITE, S VIDEO)	NOT USED
DVP5	PAL AV CONT	144	PAL IMAGE SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL AV BRIGHT	122	PAL BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL AV COLOR	52	PAL COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL AV TINT	138	PAL TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL AV SHARP V	100	PAL V PICTURE QUALITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL AV SHARP H1	200	PAL H PICTURE QUALITY SETTING 1 (COMPOSITE, S VIDEO)	NOT USED
	PAL AV SHARP H2	160	PAL H PICTURE QUALITY SETTING 2 (COMPOSITE, S VIDEO)	NOT USED
DVP6	SECAM AV CONT	144	SECAM IMAGE SETTING (COMPOSITE, S VIDEO)	NOT USED
	SECAM AV BRIGHT	122	SECAM BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	SECAM AV COLOR	52	SECAM COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	SECAM AV TINT	138	SECAM TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	SECAM AV SHARP V	100	SECAM V PICTURE QUALITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	SECAM AV SHARP H1	200	SECAM H PICTURE QUALITY SETTING 1 (COMPOSITE, S VIDEO)	NOT USED
	SECAM AV SHARP H2	160	SECAM H PICTURE QUALITY SETTING 2 (COMPOSITE, S VIDEO)	NOT USED

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)
DVP7	PAL60 AV CONT	144	PAL60 IMAGE SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL60 AV BRIGHT	122	PAL60 BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL60 AV COLOR	52	PAL60 COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL60 AV TINT	138	PAL60 TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL60 AV SHARP V	100	PAL60 V PICTURE QUALITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL60 AV SHARP H1	200	PAL60 H PICTURE QUALITY SETTING 1 (COMPOSITE, S VIDEO)	NOT USED
	PAL60 AV SHARP H2	160	PAL60 H PICTURE QUALITY SETTING 2 (COMPOSITE, S VIDEO)	NOT USED
DVP8	PAL-M TV CONT	144	PAL-M IMAGE SETTING (TV)	NOT USED
	PAL-M AV CONT	144	PAL-M IMAGE SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-M TV BRIGHT	122	PAL-M BRIGHTNESS SETTING (TV)	NOT USED
	PAL-M AV BRIGHT	122	PAL-M BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-M TV COLOR	52	PAL-M COLOR DENSITY SETTING (TV)	NOT USED
	PAL-M AV COLOR	52	PAL-M COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-M TV TINT	138	PAL-M TINT SETTING (TV)	NOT USED
	PAL-M AV TINT	138	PAL-M TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-M TV SHARP V	100	PAL-M V PICTURE QUALITY SETTING (TV)	NOT USED
	PAL-M AV SHARP V	100	PAL-M V PICTURE QUALITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-M TV SHARP H1	200	PAL-M H PICTURE QUALITY SETTING 1 (TV)	NOT USED
	PAL-M AV SHARP H1	200	PAL-M H PICTURE QUALITY SETTING 1 (COMPOSITE, S VIDEO)	NOT USED
	PAL-M TV SHARP H2	150	PAL-M H PICTURE QUALITY SETTING 2 (TV)	NOT USED
	PAL-M AV SHARP H2	160	PAL-M H PICTURE QUALITY SETTING 2 (COMPOSITE, S VIDEO)	NOT USED
DVP9	PAL-N TV CONT	144	PAL-N IMAGE SETTING (TV)	NOT USED
	PAL-N AV CONT	144	PAL-N IMAGE SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-N TV BRIGHT	122	PAL-N BRIGHTNESS SETTING (TV)	NOT USED
	PAL-N AV BRIGHT	122	PAL-N BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-N TV COLOR	52	PAL-N COLOR DENSITY SETTING (TV)	NOT USED
	PAL-N AV COLOR	52	PAL-N COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-N TV TINT	138	PAL-N TINT SETTING (TV)	NOT USED
	PAL-N AV TINT	138	PAL-N TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-N TV SHARP V	100	PAL-N V PICTURE QUALITY SETTING (TV)	NOT USED
	PAL-N AV SHARP V	100	PAL-N V PICTURE QUALITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-N TV SHARP H1	200	PAL-N H PICTURE QUALITY SETTING 1 (TV)	NOT USED
	PAL-N AV SHARP H1	200	PAL-N H PICTURE QUALITY SETTING 1 (COMPOSITE, S VIDEO)	NOT USED
	PAL-N TV SHARP H2	150	PAL-N H PICTURE QUALITY SETTING 2 (TV)	NOT USED
	PAL-N AV SHARP H2	160	PAL-N H PICTURE QUALITY SETTING 2 (COMPOSITE, S VIDEO)	NOT USED
DVP10	525I CONT	144	525I IMAGE SETTING (TV)	NOT USED
	525I BRIGHT	122	525I BRIGHTNESS SETTING (TV)	NOT USED
	525I COLOR	78	525I COLOR DENSITY SETTING (TV)	NOT USED
	525I TINT	146	525I TINT SETTING (TV)	NOT USED
	525I SHARP V	100	525I V PICTURE QUALITY SETTING (TV)	NOT USED
	525I SHARP H1	160	525I H PICTURE QUALITY SETTING 1 (TV)	NOT USED
	525I SHARP H2	160	525I H PICTURE QUALITY SETTING 2 (TV)	NOT USED
	525P CONT	144	525P IMAGE SETTING (COMPOSITE, S VIDEO)	NOT USED
	525P BRIGHT	122	525P BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	525P COLOR	78	525P COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	525P TINT	146	525P TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	525P SHARP V	100	525P V PICTURE QUALITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	525P SHARP H1	120	525P H PICTURE QUALITY SETTING 1 (COMPOSITE, S VIDEO)	NOT USED
	525P SHARP H2	120	525P H PICTURE QUALITY SETTING 2 (COMPOSITE, S VIDEO)	NOT USED

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)
DVP11	625I CONT	144	625I IMAGE SETTING (TV)	NOT USED
	625I BRIGHT	122	625I BRIGHTNESS SETTING (TV)	NOT USED
	625I COLOR	78	625I COLOR DENSITY SETTING (TV)	NOT USED
	625I TINT	146	625I TINT SETTING (TV)	NOT USED
	625I SHARP V	100	625I V PICTURE QUALITY SETTING (TV)	NOT USED
	625I SHARP H1	160	625I H PICTURE QUALITY SETTING 1 (TV)	NOT USED
	625I SHARP H2	160	625I H PICTURE QUALITY SETTING 2 (TV)	NOT USED
	625P CONT	144	625P IMAGE SETTING (TV)	NOT USED
	625P BRIGHT	122	625P BRIGHTNESS SETTING (TV)	NOT USED
	625P COLOR	78	625P COLOR DENSITY SETTING (TV)	NOT USED
	625P TINT	146	625P TINT SETTING (TV)	NOT USED
	625P SHARP V	100	625P V PICTURE QUALITY SETTING (TV)	NOT USED
	625P SHARP H1	120	625P H PICTURE QUALITY SETTING 1 (TV)	NOT USED
	625P SHARP H2	120	625P H PICTURE QUALITY SETTING 2 (TV)	NOT USED
DVP12	1125I CONT	144	1125I IMAGE SETTING (TV)	NOT USED
	1125I BRIGHT	122	1125I BRIGHTNESS SETTING (TV)	NOT USED
	1125I COLOR	78	1125I COLOR DENSITY SETTING (TV)	NOT USED
	1125I TINT	146	1125I TINT SETTING (TV)	NOT USED
	1125I SHARP V	100	1125I V PICTURE QUALITY SETTING (TV)	NOT USED
	1125I SHARP H1	100	1125I H PICTURE QUALITY SETTING 1 (TV)	NOT USED
	1125I SHARP H2	100	1125I H PICTURE QUALITY SETTING 2 (TV)	NOT USED
	750P CONT	144	750P IMAGE SETTING (TV)	NOT USED
	750P BRIGHT	122	750P BRIGHTNESS SETTING (TV)	NOT USED
	750P COLOR	78	750P COLOR DENSITY SETTING (TV)	NOT USED
	750P TINT	146	750P TINT SETTING (TV)	NOT USED
	750P SHARP V	100	750P V PICTURE QUALITY SETTING (TV)	NOT USED
	750P SHARP H1	100	750P H PICTURE QUALITY SETTING 1 (TV)	NOT USED
	750P SHARP H2	100	750P H PICTURE QUALITY SETTING 2 (TV)	NOT USED

DEFAULT CHART OF ADJUSTMENT PROCESS TUNER ITEMS

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)
BASIC SETTINGS				
TUNER1	AFT UP	1.80	AFT VOLTAGE REFERENCE LEVEL (ALL BANDS)	NOT USED
	AFT DOWN	1.20	AFT VOLTAGE REFERENCE LEVEL (ALL BANDS)	NOT USED
	LSYNC	150	SYNC JUDGMENT THRESHOLD (TV)	NOT USED
	HSYNC	162	SYNC JUDGMENT THRESHOLD (TV)	NOT USED
	LSYNC2	150	SYNC JUDGMENT THRESHOLD (FOR TV AFT CHANNEL (1-CH) SELECT)	NOT USED
	HSYNC2	162	SYNC JUDGMENT THRESHOLD (FOR TV AFT CHANNEL (1-CH) SELECT)	NOT USED
	AVSYNC	1	SYNC DETERMINATION THRESHOLD (EXTERNAL INPUT)	
	COMPSYNC	3	SYNC JUDGMENT THRESHOLD (COLOR DIFFERENCE INPUT)	NOT USED
	EDS TEST	10	DURATION UNTIL JUDGMENT OF NO EDS TIME DATA (SECONDS)	NOT USED
TUNER2	AFT FARTIME	50	CHANNEL PRESET TIME ADJUSTMENT 1	NOT USED
	AFT NEARTIME	30	CHANNEL PRESET TIME ADJUSTMENT 2	NOT USED
	AFT NEARTIME	10	CHANNEL PRESET TIME ADJUSTMENT 3	NOT USED
	AFT 1STEPTIME	10	CHANNEL PRESET TIME ADJUSTMENT 4	NOT USED
	AFT CSYNCTIME	50	CHANNEL PRESET TIME ADJUSTMENT 5	NOT USED
	SYNC ON	10	CHANNEL PRESET SYNC JUDGMENT, CONTINUOUS MATCHING TIMES(CH SEARCH, AIR/CABLE JUDGMENT, CLOCK SYNC JUDGMENT)	NOT USED
	SYNC WIDTH	1	CHANNEL PRESET SYNC JUDGMENT, THRESHOLD (SYNC PROVIDED JUST AFTER THE MAXIMUM-TO-MINIMUM DIFFERENCE COMES SMALLER)	NOT USED

DEFAULT CHART OF OTHER ADJUSTMENT PROCESS ITEMS

Page No.	Item	Initial Value	Function	Response precautions on servicing (Do not change other items than designated.)

OTHERS

OTHERS1	DAC DATA	—	DAC-RELATED GENERAL-PURPOSE VARIABLE SETTINGS	NOT USED
	L ERROR WAIT	15s	LAMP ERROR DETECT WAIT TIME	NOT USED
	L ERROR H TIME	1.0s	LAMP ERROR DETECT TIME	NOT USED
	TV AUTO GAIN	OFF	AUTO GAIN SETTING FOR TV	NOT USED
	PWM FREQ	150	DIMMER FREQUENCY SETTING (IN HZ)	NOT USED
	PWM DUTY	0	DIMMER DUTY SETTING	NOT USED
	OPC THRESHOLD	24	INPUT LEVEL THRESHOLD FROM BRIGHTNESS SENSOR STOP MODE TO OPERATION MODE	NOT USED
	HOTEL POWERFIX	OFF	USED FOR FIXED HOTEL MODE POWER ON	NOT USED
	COMP SYSTEM	AUTO	COMPONENT SIGNAL SELECT IN ADJUSTMENT PROCESS	NOT USED

REMOCON CODE DISPLAYED AT THE BOTTOM

OTHERS

OTHERS2	CLOSED CAPTION	15	CLOSED CAPTION THRESH LEVEL	NOT USED

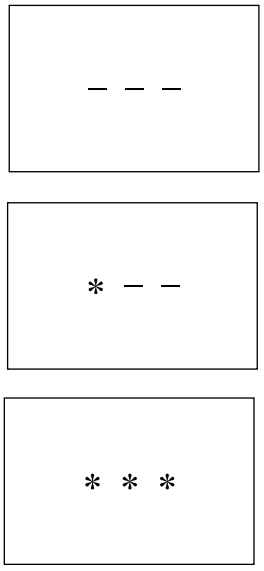
AUTO CLOCK DISPLAYED ON THE 2ND, 3RD AND 4TH LINES FROM BOTTOM FOR US-DESTINED MODELS

PUBLIC MODE SETTING PROCEDURE

1. How to start Public Mode

- There are the following two ways to get the public mode setup screen displayed.

① 1) Press the "INPUT" and "VOL (+)" keys on the set at once and turn on the power.
2) Get the password input screen displayed.



Procedure

- The input starts with the leftmost digit.
- Use the numeric keys [1] thru [9] and [10/0] keys on the remote controller. The other keys are not acceptable.
- With a numeric-key input, "–" will change to "*". The input position will move one digit to the right.
- With all the 3 digits entered, the password will be verified.

3) The 3-digit password is now verified.
The password [0] [2] [7] provides for the public mode screen. (This screen comes on with whatever adjustment process settings.)
With any other passwords, the screen changes to the normal mode.

② In the adjustment process mode, turn on "PUBLIC MODE". Also press the "CH (∧)" and "VOL (+)" keys on the set at once and turn on the power.

2. How to exit Public Mode

There are the following ways to quit the public mode setup screen.

- Turn off "PUBLIC MODE" in the adjustment process mode. (☆) ← This way alone is not for quitting the setup screen, but for quitting the mode itself.
- Turn off the power with the "POWER" key. (★)
- Select "ENTER". (★)
- Move the cursor to "RESET" and press the "FLASHBACK" key. (Back to the normal mode screen)(☆)

★ ... "PUBLIC MODE" stays on in the adjustment process mode.
☆ ... The settings will be back to the factory ones.

3. Public Mode Setting Values

- With the factory settings made, the public mode settings get initialized. (The adjustment process remains intact.)

4. Public Mode Menu

The guidance is not displayed onscreen.
Setup procedure

- To move the cursor up and down, use the "cursor UP/DOWN" key (remote controller) and "CH (∧)/(∨)" key (remote controller and set).
- To change the settings, use the "cursor RIGHT/LEFT" key (remote controller) and "VOL (+)/(–)" key (remote controller and set).
- To save new settings, keep the cursor at "Enter" and use the "cursor RIGHT/LEFT" key (remote controller) and "VOL (+)/(–)" key (remote controller and set).

Public mode	
Maximum volume	[60]
Volume fixed	[Variable]
Volume fixed level	[20]
RC button	[Respond]
Panel button	[Respond]
Menu button	[Respond]
On screen display	[Yes]
Input mode start	[Normal]
Input mode fixed	[Variable]
Reset	
Enter	

5. On Setting Items

* "EZ-SETUP" discussed below indicates "EZ-SETUP after the first power-on".

(1) MAXIMUM VOLUME

Selection	Adjustment from 1 to 60 (no loop)
Default	60
Explanation	Sound volume can not be adjusted higher than the preset value.
Limit in Setting	• When the sound volume is set lower than 59, only figures are displayed and the sound volume bar is not displayed. • The maximum sound volume for ON-timer (Wake up timer) is limited also to the preset value.
Exception	• In the item "VOLUME" of adjustment process, the sound volume can be set freely irrespective of this setting.
Remarks	• Setting is valid only for the speakers of the unit. (As for the headphone, the sound volume can be set up to 60 irrespective of the limit.) • In line output (sound volume variable), the sound volume can be adjusted from -60 to 0 irrespective of pre-adjusted value. • When the sound volume is set higher than the MAX setting by the adjusting process or headphone, the sound volume control operation is prohibited for turn-up and the sound volume should be turned down to MAX in this state.

(2) VOLUME FIXED

Selection	Selection between "Variable" and "Fixed" (loop provided)
Default	Variable
Explanation	Sound volume is fixed and made invariable.
Limit in Setting	• The sound volume for the ON-timer (Wake up timer) is fixed also without display of menu. Besides, the setting is made impossible. (Basically, the menu is not displayed.) • The following keys become invalid: • Sound volume Up/Down (VOL +/-) [for both remote control and the unit] • Mute (MUTE)
Exception	• In the item "VOLUME" of adjustment process, the sound volume can be set freely irrespective of this setting.
Remarks	• In "Variable" setting, the sound volume had been conventionally set at 1 but this operation has been abolished (and follows the last memory). • The sound volume for the ON-time is not set at 1 either and the sound volume set value of the ON-timer before executing the hotel mode is held. • Setting is valid only for the speakers of the unit. (As for the headphone, the sound volume can be set up to 60 irrespective of the limit.) • In line output (sound volume variable), the sound volume can be adjusted from -60 to 0 irrespective of pre-adjusted value. • As for sound volume fixing and sound volume MAX level, the sound volume fixing has priority. • Once the sound volume has been changed by adjustment process or headphone, it should be set back to the sound volume preset by sound volume fixing level when the adjustment process ends or when the headphone is removed.

(3) VOLUME FIXED LEVEL

Selection	Adjustment from 1 to 60 (no loop)
Default	20
Explanation	The sound volume to be fixed by "Volume fixed" is determined.
Limit in Setting	None
Exception	None
Remarks	Setting is valid only when "Volume fixed" is selected for "fixed". This must be confirmed actually by changing also the sound volume in accordance with setting.

(4) R/C BUTTON

Selection	Selection between "Respond" , "Limited" and "No respond" (loop provide)
Default	Respond
Explanation	Keys acceptable by remote control are limited or reception of keys can be prohibited.
Limit in Setting	①In "limited" setting, only power ON/OFF, sound volume ▲▼, tuning ▲▼ and BACKLIGHT (brightness sensor) are accepted. ②In "No respond" setting, all the keys (including the power key) are not accepted.
Exception	• Adjustment process, factory setting, inspection process and hotel only keys are valid irrespective of setting. • All the keys can be used in adjustment process, inspection mode and hotel menu irrespective of setting. • All the keys can be used also in the initial EZ-Setup after power-ON irrespective of setting.
Remarks	

(5) PANEL BUTTON

Selection	Selection between "Respond" and "No respond" (loop provide)
Default	Respond
Explanation	All the operations by keys (except the power key) of the unit can be invalidated.
Limit in Setting	
Exception	• Inspection mode and hotel menu mode can be started irrespective of setting. • All the keys can be used in adjustment process, inspection mode and hotel menu irrespective of setting. • In U.S.A model, all the keys can be used also in the initial EZ-Setup after power-ON irrespective of setting.
Remarks	

(6) MENU BUTTON

Selection	Selection between "Respond" and "No respond" (loop provide)
Default	Respond
Explanation	In "No respond" setting, the menu operation by the menu key of the remote control and the menu key of the unit are invalidated.
Limit in Setting	• ON-timer (Wakeup Timer) is turned OFF. • The following keys become invalid. Wake-up timer and clock setting keys and all of the direct change keys to menu display
Exception	• Inspection mode and hotel menu mode can be started irrespective of setting. • All the keys can be used in adjustment process, inspection mode and hotel menu irrespective of setting. • All the keys can be used also in the initial EZ-Setup after power-ON irrespective of setting.
Remarks	

(7) ON SCREEN DISPLAY

Selection	Selection between "Yes" , "Limited" (loop provide)
Default	Yes
Explanation	The following OSD displays are made ineffective. Displays of menu group, channel call, sound volume bar and direct key call
Limit in Setting	• ON-timer (Wake-up timer) is cleared and set to "OFF". • Set time of the OFF-timer (SLEEP TIMER) is cleared. • Setting of the no-signal power-OFF (AUTO POWER OFF) is cleared to "OFF". • Setting of the no-operation power-OFF is cleared to "OFF". • Keys falling under any of the following items become invalid. ①Appearance of screen changes and the sound changes. ②Personal functions which are hard to restore. Ex.) Screen display, menu, OFF-timer, ON-timer, AV MODE, screen size switching, clock setting, treble emphasis, AUDIO ONLY, sound changeover, LANGUAGE, CLOSED CAPTION
Others	• Simple input switching is generated. Those which are restored soon after leaving as they are and may be requested for change by customer are not prohibited. Ex.) Brightness sensor (BACKLIGHT) and PIC. FLIP
Exception	• Such a caution which is displayed independently is displayed as it is. Non-responding signal caution, V-Chip caution and power-ON fixing caution
Remarks	• In "No" setting, the setting of "SOUND ONLY MODE" is changed to "OFF" and selecting operation is made prohibited. • When CC has already been ON, CLOSED CAPTION is displayed.

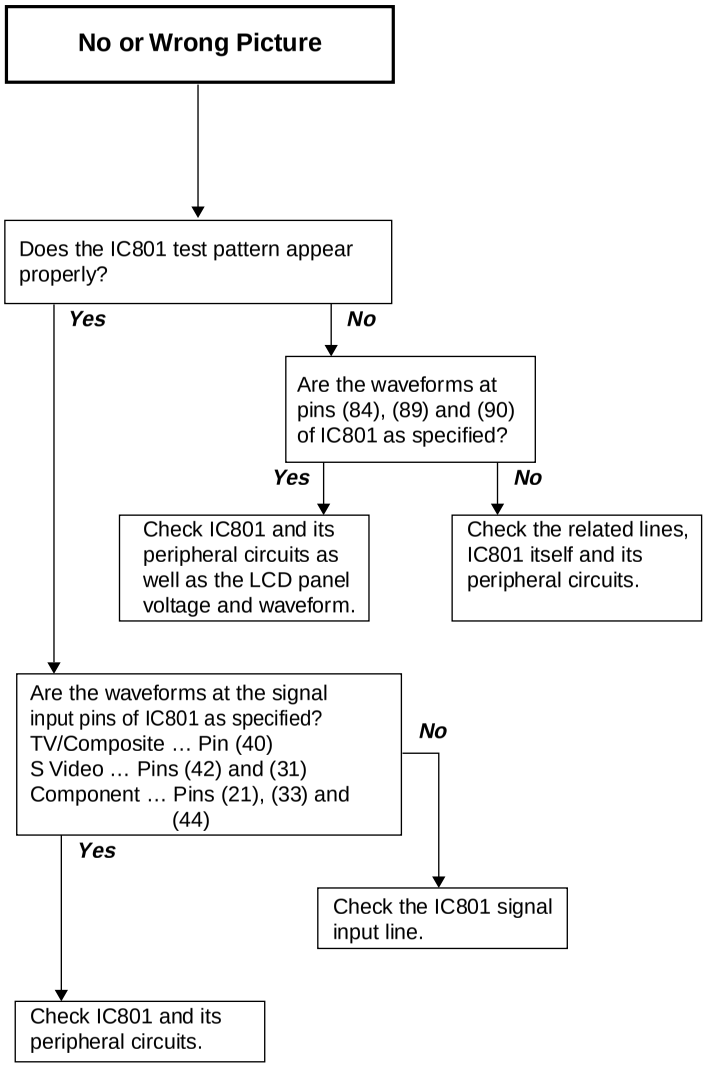
(8) INPUT MODE START

Selection	Selection between "Normal" , "TV (CH∗)" "COMPONENT" "AV1" and "AV2" (loop provide)
Default	Normal
Explanation	In power-ON, the input source to be started or channel can be set. (In standard mode, the operation follows the last memory.)
About options	• All the input sources in the model are made selectable. • When the input/output switchable input source is selected and the input source is set to output, the setting of input/output switching is changed to input at the execution of hotel menu. In addition, the input/output switching by menu is prohibited. • In TV mode, the display of all channels is stopped and it is treated as an input source. At this time, the channel to be set follows the last memory and the content of the last memory is included in the notation by options. Ex.) TV (CH2), TV (CH4) etc. • The order of appearance of options in the hotel menu should agree with the order of toggles by input switching key.
Limit in Setting	• The display of channel setting menu and the channel setting operation are prohibited (except for MCL).
Exception	• In the start by "ON-timer (Wake-up timer)", the channel set by ON-timer (Wake-up timer) has priority.
Remarks	• In setting at "Normal", the setting of "Input mode fixed" is changed to "Variable" and selection should be prohibited.

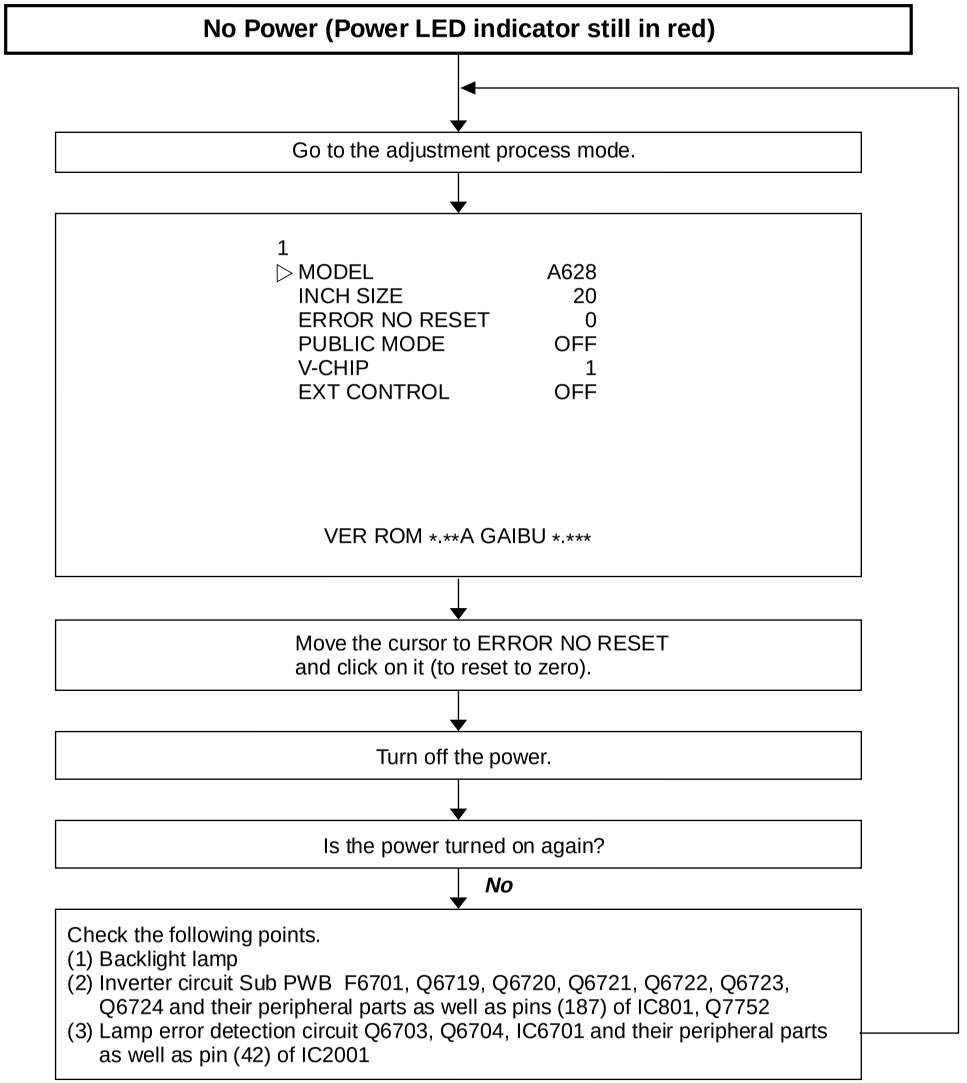
(9) INPUT MODE FIXED

Selection	Selection between "Variable" and "Fixed" (loop provide)
Default	– (Variable)
Explanation	The input mode is fixed at the input source or the channel set at the "Input mode start" in 9 and other input sources and channels can be made non-selectable.
Limit in Setting	• With the execution of hotel mode, the input source is forced to change to that set by "Input mode start" and the channel switching and input switching are prohibited thereafter. • ON-timer's (Wake-up timer) channel items are not displayed or the operation is prohibited. (Basically, they are not displayed.) • The following keys are invalidated. CH ▲▼, direct tuning button, FLASHBACK, input ∗However, the keys (input switching and CH ▲▼ keys) of the unit for menu operation remain valid.
Exception	None
Remarks	• In the following case, setting is cancelled and mode is changed to "Variable". ①When the setting of "Input mode start" is set to "Standard (Normal)"

No or Wrong Picture


Does the IC801 test pattern appear properly?
Yes
No
Are the waveforms at pins (84), (89) and (90) of IC801 as specified?
Yes
No
Check IC801 and its peripheral circuits as well as the LCD panel voltage and waveform.
Check the related lines, IC801 itself and its peripheral circuits.
Are the waveforms at the signal input pins of IC801 as specified?
TV/Composite … Pin (40)
S Video … Pins (42) and (31)
Component … Pins (21), (33) and (44)
No
Yes
Check the IC801 signal input line.
Check IC801 and its peripheral circuits.

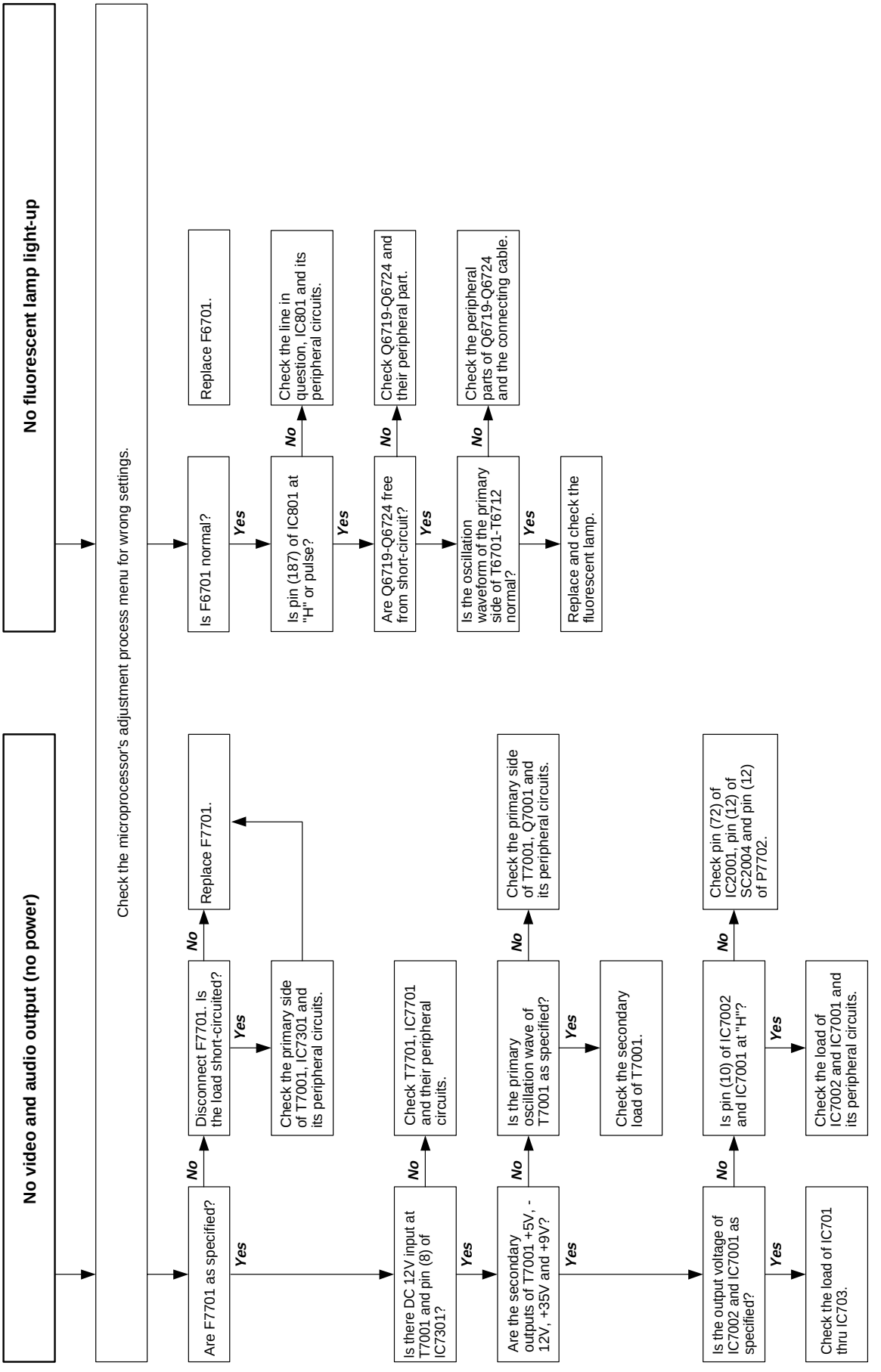
No Power (Power LED indicator still in red)


Go to the adjustment process mode.
1
▷ MODEL A628
INCH SIZE 20
ERROR NO RESET 0
PUBLIC MODE OFF
V-CHIP 1
EXT CONTROL OFF
VER ROM *.**A GAIBU *.***
Move the cursor to ERROR NO RESET and click on it (to reset to zero).
Turn off the power.
Is the power turned on again?
No
Check the following points.
(1) Backlight lamp
(2) Inverter circuit Sub PWB F6701, Q6719, Q6720, Q6721, Q6722, Q6723, Q6724 and their peripheral parts as well as pins (187) of IC801, Q7752
(3) Lamp error detection circuit Q6703, Q6704, IC6701 and their peripheral parts as well as pin (42) of IC2001

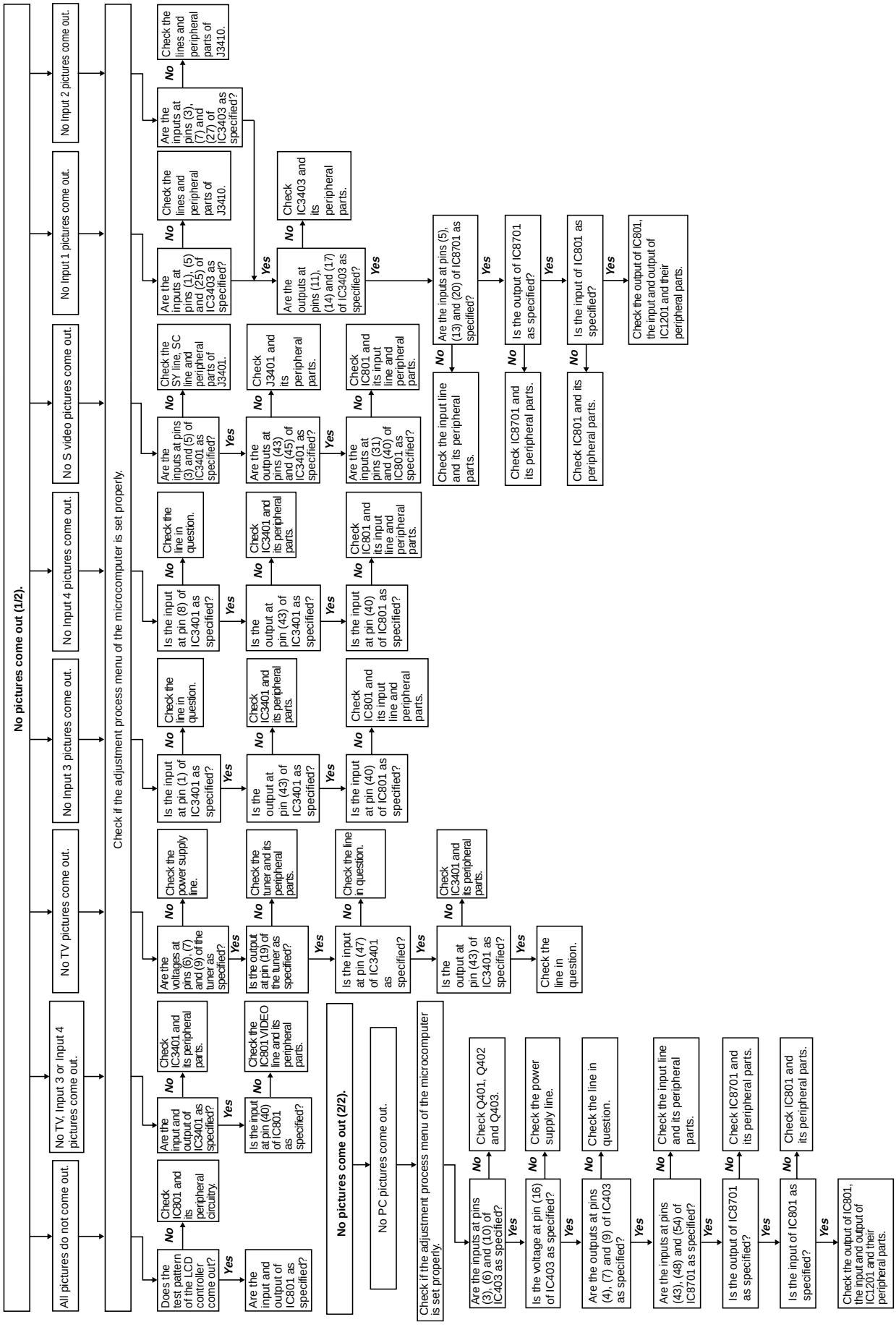
Note:

This model is equipped with the lamp error detection function that detects the current flowing into the fluorescent lamp and protects the backlight lamp drive circuit.
If a lamp error is detected, the microprocessor interrupts the unit and the ERROR NO RESET setting will go up.
When the ERROR NO RESET setting has reached "5", the microprocessor turns and keeps off the unit's power. To resume the power, take the above procedure to clear the ERROR NO RESET setting.

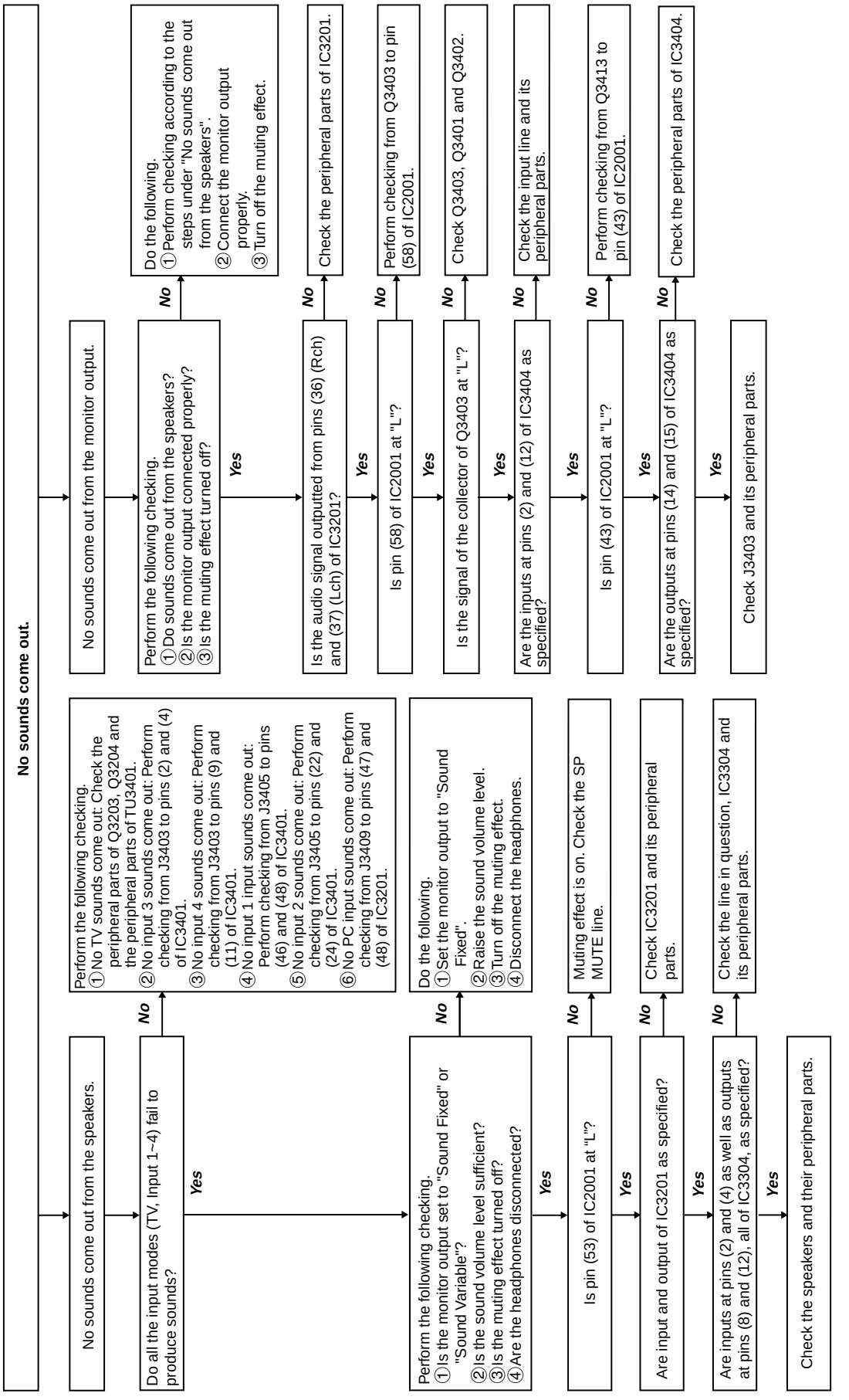
TROUBLE SHOOTING TABLE (Continued)


No video and audio output (no power)
No fluorescent lamp light-up
Check the microprocessor's adjustment process menu for wrong settings.
Are F7701 as specified?
No
Yes
Disconnect F7701. Is the load short-circuited?
No
Yes
Replace F7701.
Check the primary side of T7001, IC7301 and its peripheral circuits.
Is there DC 12V input at T7001 and pin (8) of IC7301?
No
Yes
Check T7701, IC7701 and their peripheral circuits.
Are the secondary outputs of T7001 +5V, -12V, +35V and +9V?
No
Yes
Is the primary oscillation wave of T7001 as specified?
No
Yes
Check the primary side of T7001, Q7001 and its peripheral circuits.
Check the secondary load of T7001.
Is the output voltage of IC7002 and IC7001 as specified?
No
Yes
Is pin (10) of IC7002 and IC7001 at "H"?
No
Yes
Check pin (72) of IC2001, pin (12) of SC2004 and pin (12) of P7702.
Check the load of IC7002 and IC7001 and its peripheral circuits.
Check the load of IC701 thru IC703.
Is F6701 normal?
No
Yes
Replace F6701.
Is pin (187) of IC801 at "H" or pulse?
No
Yes
Check the line in question, IC801 and its peripheral circuits.
Are Q6719-Q6724 free from short-circuit?
No
Yes
Check Q6719-Q6724 and their peripheral part.
Is the oscillation waveform of the primary side of T6701-T6712 normal?
No
Yes
Check the peripheral parts of Q6719-Q6724 and the connecting cable.
Replace and check the fluorescent lamp.

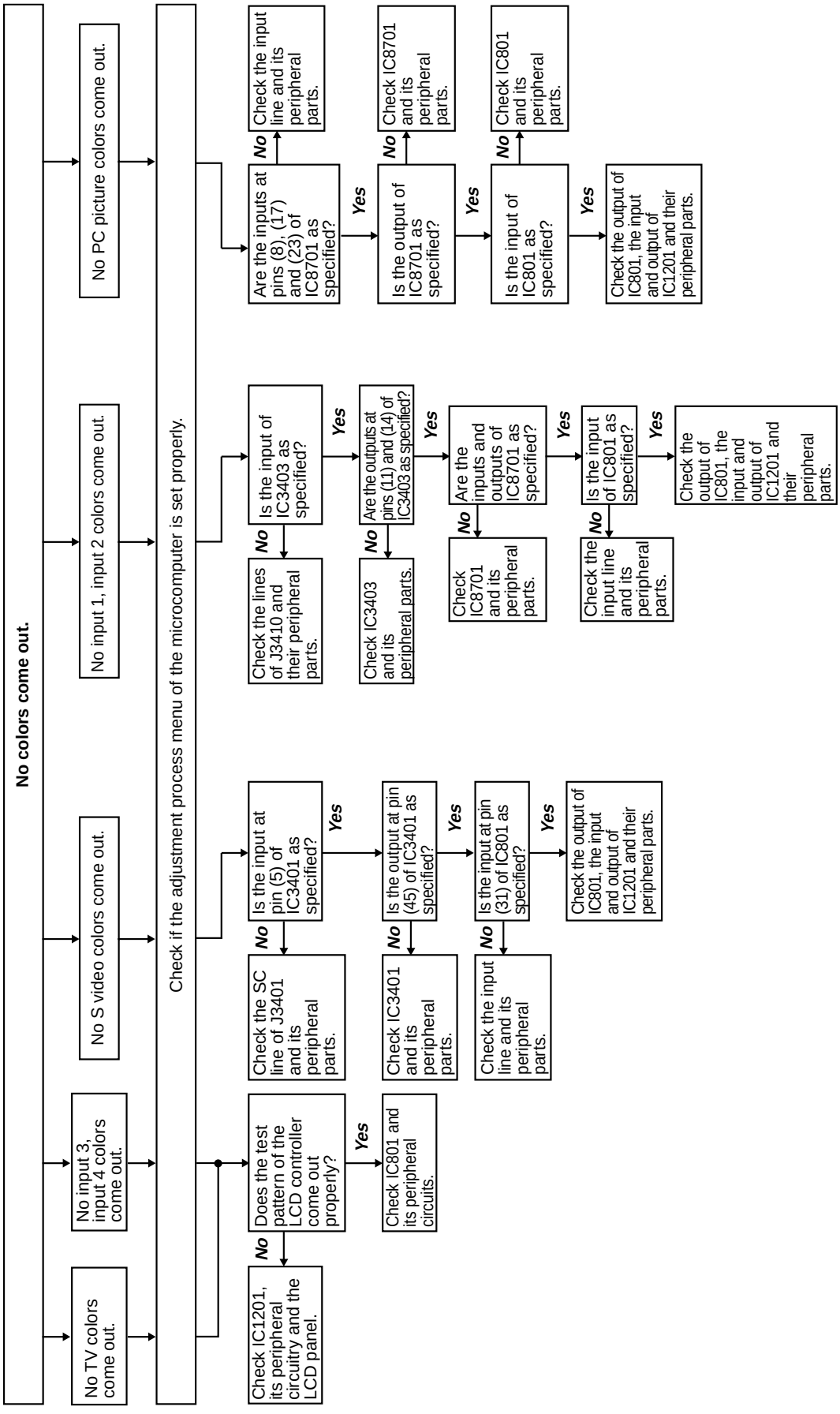
TROUBLE SHOOTING TABLE (Continued)


No pictures come out (1/2).
All pictures do not come out.
No TV, Input 3 or Input 4 pictures come out.
No TV pictures come out.
No Input 3 pictures come out.
No Input 4 pictures come out.
No S video pictures come out.
No Input 1 pictures come out.
No Input 2 pictures come out.
Check if the adjustment process menu of the microcomputer is set properly.
Does the test pattern of the LCD controller come out?
No
Check IC801 and its peripheral circuitry.
Yes
Are the input and output of IC801 as specified?
Are the input and output of IC3401 as specified?
No
Check IC3401 and its peripheral parts.
Yes
Is the input at pin (40) of IC801 as specified?
No
Check the IC801 VIDEO line and its peripheral parts.
Yes
Are the voltages at pins (6), (7) and (9) of the tuner as specified?
No
Check the power supply line.
Yes
Is the output at pin (19) of the tuner as specified?
No
Check the tuner and its peripheral parts.
Yes
Is the input at pin (47) of IC3401 as specified?
No
Check the line in question.
Yes
Is the output at pin (43) of IC3401 as specified?
No
Check IC3401 and its peripheral parts.
Yes
Check the line in question.
Is the input at pin (1) of IC3401 as specified?
No
Check the line in question.
Yes
Is the output at pin (43) of IC3401 as specified?
No
Check IC3401 and its peripheral parts.
Yes
Is the input at pin (40) of IC801 as specified?
No
Check IC801 and its input line and peripheral parts.
Yes
Is the input at pin (8) of IC3401 as specified?
No
Check the line in question.
Yes
Is the output at pin (43) of IC3401 as specified?
No
Check IC3401 and its peripheral parts.
Yes
Is the input at pin (40) of IC801 as specified?
No
Check IC801 and its input line and peripheral parts.
Yes
Are the inputs at pins (3) and (5) of IC3401 as specified?
No
Check the SY line, SC line and peripheral parts of J3401.
Yes
Are the outputs at pins (43) and (45) of IC3401 as specified?
No
Check J3401 and its peripheral parts.
Yes
Are the inputs at pins (31) and (40) of IC801 as specified?
No
Check IC801 and its input line and peripheral parts.
Yes
Are the inputs at pins (1), (5) and (25) of IC3403 as specified?
No
Check the lines and peripheral parts of J3410.
Yes
Are the outputs at pins (11), (14) and (17) of IC3403 as specified?
No
Check IC3403 and its peripheral parts.
Yes
Are the inputs at pins (5), (13) and (20) of IC8701 as specified?
No
Check the input line and its peripheral parts.
Yes
Is the output of IC8701 as specified?
No
Check IC8701 and its peripheral parts.
Yes
Is the input of IC801 as specified?
No
Check IC801 and its peripheral parts.
Yes
Check the output of IC801, the input and output of IC1201 and their peripheral parts.
Are the inputs at pins (3), (7) and (27) of IC3403 as specified?
No
Check the lines and peripheral parts of J3410.
No pictures come out (2/2).
No PC pictures come out.
Check if the adjustment process menu of the microcomputer is set properly.
Are the inputs at pins (3), (6) and (10) of IC403 as specified?
No
Check Q401, Q402 and Q403.
Yes
Is the voltage at pin (16) of IC403 as specified?
No
Check the power supply line.
Yes
Are the outputs at pins (4), (7) and (9) of IC403 as specified?
No
Check the line in question.
Yes
Are the inputs at pins (43), (48) and (54) of IC8701 as specified?
No
Check the input line and its peripheral parts.
Yes
Is the output of IC8701 as specified?
No
Check IC8701 and its peripheral parts.
Yes
Is the input of IC801 as specified?
No
Check IC801 and its peripheral parts.
Yes
Check the output of IC801, the input and output of IC1201 and their peripheral parts.

TROUBLE SHOOTING TABLE (Continued)

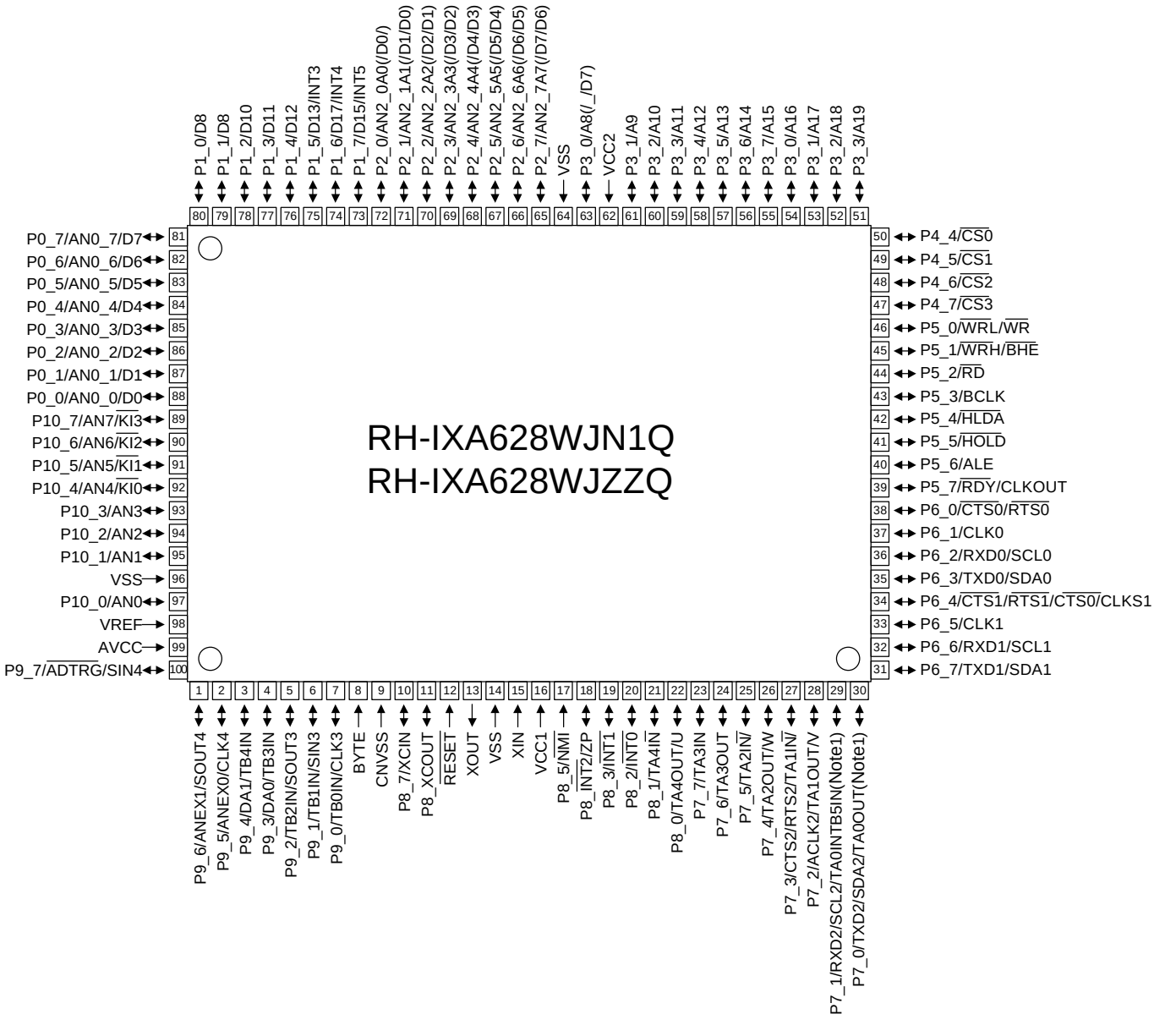

No sounds come out.
No sounds come out from the speakers.
Do all the input modes (TV, Input 1~4) fail to produce sounds?
No
Perform the following checking.
① No TV sounds come out: Check the peripheral parts of Q3203, Q3204 and the peripheral parts of TU3401.
② No input 3 sounds come out: Perform checking from J3403 to pins (2) and (4) of IC3401.
③ No input 4 sounds come out: Perform checking from J3403 to pins (9) and (11) of IC3401.
④ No input 1 input sounds come out: Perform checking from J3405 to pins (46) and (48) of IC3401.
⑤ No input 2 sounds come out: Perform checking from J3405 to pins (22) and (24) of IC3401.
⑥ No PC input sounds come out: Perform checking from J3409 to pins (47) and (48) of IC3201.
Yes
Perform the following checking.
①Is the monitor output set to "Sound Fixed" or "Sound Variable"?
②Is the sound volume level sufficient?
③Is the muting effect turned off?
④Are the headphones disconnected?
No
Do the following.
①Set the monitor output to "Sound Fixed".
②Raise the sound volume level.
③Turn off the muting effect.
④Disconnect the headphones.
Yes
Is pin (53) of IC2001 at "L"?
No
Muting effect is on. Check the SP MUTE line.
Yes
Are input and output of IC3201 as specified?
No
Check IC3201 and its peripheral parts.
Yes
Are inputs at pins (2) and (4) as well as outputs at pins (8) and (12), all of IC3304, as specified?
No
Check the line in question, IC3304 and its peripheral parts.
Yes
Check the speakers and their peripheral parts.
No sounds come out from the monitor output.
Perform the following checking.
①Do sounds come out from the speakers?
②Is the monitor output connected properly?
③Is the muting effect turned off?
No
Do the following.
①Perform checking according to the steps under "No sounds come out from the speakers".
②Connect the monitor output properly.
③Turn off the muting effect.
Yes
Is the audio signal outputted from pins (36) (Rch) and (37) (Lch) of IC3201?
No
Check the peripheral parts of IC3201.
Yes
Is pin (58) of IC2001 at "L"?
No
Perform checking from Q3403 to pin (58) of IC2001.
Yes
Is the signal of the collector of Q3403 at "L"?
No
Check Q3403, Q3401 and Q3402.
Yes
Are the inputs at pins (2) and (12) of IC3404 as specified?
No
Check the input line and its peripheral parts.
Yes
Is pin (43) of IC2001 at "L"?
No
Perform checking from Q3413 to pin (43) of IC2001.
Yes
Are the outputs at pins (14) and (15) of IC3404 as specified?
No
Check the peripheral parts of IC3404.
Yes
Check J3403 and its peripheral parts.

TROUBLE SHOOTING TABLE (Continued)


No colors come out.
No TV colors come out.
No input 3, input 4 colors come out.
No S video colors come out.
No input 1, input 2 colors come out.
No PC picture colors come out.
Check if the adjustment process menu of the microcomputer is set properly.
Check IC1201, its peripheral circuitry and the LCD panel.
No
Does the test pattern of the LCD controller come out properly?
Yes
Check IC801 and its peripheral circuits.
Check the SC line of J3401 and its peripheral parts.
No
Is the input at pin (5) of IC3401 as specified?
Yes
Check IC3401 and its peripheral parts.
No
Is the output at pin (45) of IC3401 as specified?
Yes
Check the input line and its peripheral parts.
No
Is the input at pin (31) of IC801 as specified?
Yes
Check the output of IC801, the input and output of IC1201 and their peripheral parts.
Check the lines of J3410 and their peripheral parts.
No
Is the input of IC3403 as specified?
Yes
Check IC3403 and its peripheral parts.
No
Are the outputs at pins (11) and (14) of IC3403 as specified?
Yes
Check IC8701 and its peripheral parts.
No
Are the inputs and outputs of IC8701 as specified?
Yes
Check the input line and its peripheral parts.
No
Is the input of IC801 as specified?
Yes
Check the output of IC801, the input and output of IC1201 and their peripheral parts.
Check the input line and its peripheral parts.
No
Are the inputs at pins (8), (17) and (23) of IC8701 as specified?
Yes
Check IC8701 and its peripheral parts.
No
Is the output of IC8701 as specified?
Yes
Check IC801 and its peripheral parts.
No
Is the input of IC801 as specified?
Yes
Check the output of IC801, the input and output of IC1201 and their peripheral parts.

MAJOR IC INFORMATION

1. IC2001 (RH-iXA628WJN1Q), (RH-iXA628WJZZQ)
   1-1.Pin Connections



Note 1: N channel open drain outputs

Pin Connections (Top View)

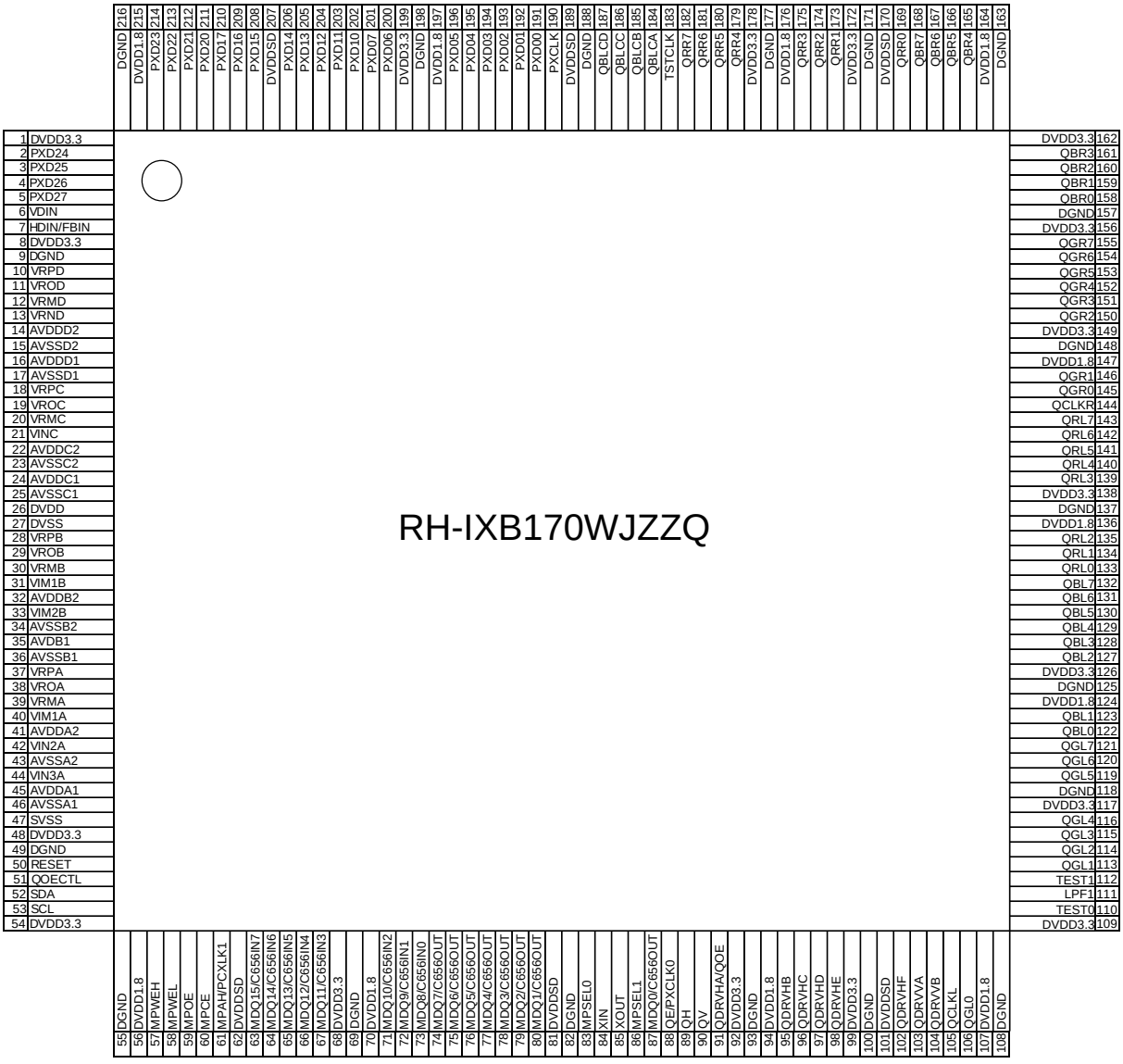
1-2. Pin Functions

Pin No.	Pin Name	I/O	Pin Name	Function
1	P96/ANEX1/Sout4	O		
2	P95/ANEX0/CLK4	O		
3	P94/DA1/TB4in	I	PC-H	PC signal HS frequency judgment
4	P93/DA0/TB3in	I	D_FIL	Component filter switching DA (No function)
5	P92/TB2in/Sout3	I	PC-V	PC signal VS frequency judgment
6	P91/TB1in/Sin3	I	CSYNC	Composite sync signal
7	P90/TB0in/CLK3	I	IREM1	Remote control signal
8	BYTE	I	BYTE	Connected to GND
9	CNVss	I	CNVss	Connected to GND (connected to Vcc1 for CNVSS at flash write)
10	P87/Xcin	I	Xcin	32kHz quartz oscillator (for clock count)
		O	P87	(No function)
11	P86/Xcout	O	Xcout	32kHz quartz oscillator (for clock count)
		O	P86	(No function)
12	RESET	I	RESET	Microprocessor reset at "L"
13	Xout	O	Xout	System clock output
14	Vss	I	Vss	GND
15	Xin	I	Xin	System clock input
16	Vcc1	I	Vcc1	VDD (+3.3V)
17	P85/NMI	I	NMI	(Connected to Vcc1 for NMI at flash write)
18	P84/INT2	O		
19	P83/INT1	I	PSWin	Main power monitor
20	P82/INT0	I	VSYNC	VSYNC signal input
21	P81/TA4in	O	RS_POWER	RS, DS control
22	P80/TA4out	O	AC_Ctrl	AC adaptor power consumption control
23	P77/TA3in	O	DAC1CS	Gradation control IC chip select
24	P76/TA3out	O		
25	P75/TA2in	O		
26	P74/TA2out	O		
27	P73/CTS2_/RTS2_/TA1in	I/O	SDA2	Serial data line 2 for I2C bus 2 system
28	P72/CLK2/TA1out	I/O	SCL2	Serial clock line 2 for I2C bus 2 system (EEPROM, AV SW(J), BS TUNER)
29	P71/RxD2/SCL2/TA0in/TB5in	I/O	SCL1	Serial clock line 1 for I2C bus 2 system (others, AV SW(not J))
30	P70/TxD2/SDA2/TA0out	I/O	SDA1	Serial data line 1 for I2C bus 2 system
31	P67/TxD1/SDA1	O	TxD	(TxD at flash write)
32	P66/RxD1/SCL1	O	RxD	(RxD at flash write)
33	P65/CLK1	O	SCLK	(Clock input at flash write)
34	P64/CTS1/RTS1/CTS0/CLKS1	O	BUSY	(Busy output at flash write)
35	P63/TxD0/SDA0	O	MPWEL	Data signal input for DVP 4-line serial (MPWEL)
36	P62/RxD0/SCL0	I	MPOE	Data output signal for DVP 4-line serial (MPOE)
37	P61/CLK0	O	MPWEH	Clock for DVP 4-line serial (MPWEH)
38	P60/CTS0/RTS0	O		
39	P57/RDY/CLKout	O	MAINSW	LED power control
40	P56/ALE	O		
41	P55/HOLD	I	POWin(EPM)	DC/DC start detect (connected to Vss for EPM at flash write)
42	P54/HLDA	I(O)	L_ERR	Fluorescent lamp error detect
43	P53/BCLK	O	S IN/OUT	Audio input/output select
44	P52/RD	O	COMP	AV selector switch
45	P51/WRH/BHE	O	TIMER(RLED)	On timer LED control (power RLED control for overseas destinations)
46	P50/WRL/WR	I	MRDY(CE)	I2C bus open connection detect (connected to Vcc2 for CE at flash write)
47	P47/CS3	O	LEDPOW(GLED)	Power LED control (common with sub-power control in Japan) (power GLED control for overseas destinations

Pin No.	Pin Name	I/O	Pin Name	Function
48	P46/CS2	O		
49	P45/CS1	O	S_SEL	AV selector switch
50	P44/CS0	O	VSHOUT	Panel gate driver voltage control
51	P43/A19	O		
52	P42/A18	O	HP MUTE	Headphones mute (at "H")
53	P41/A17	O	SP MUTE1	Main speaker mute
54	P40/A16	O		
55	P37/A15	I	HP DET	Headphones detect
56	P36/A14	O	SSTBY	Amplifier power control (1-bit-dropout models)
57	P35/A13	I	VSH IN	Panel gate driver voltage confirm
58	P34/A12	O	LMUTE	Line out audio mute
59	P33/A11	O	V IN/OUT	Video input/output select
60	P32/A10	O	SRESET	Audio IC reset output
61	P31/A9	O		
62	Vcc2	I	Vcc2	Power input
63	P30/A8	O	TCON_OUT_CTL	DVP control output control
64	Vss	I	Vss	GND
65	P27/AN27/A7	O	V_SEL	AV selector switch
66	P26/AN26/A6	O	TV_SEL	AV selector switch
67	P25/AN25/A5	O	BUS SELECT H(I2C)	DVP I2C/4-line communication system select (H: I2C control, L: Serial control)
68	P24/AN24/A4	O	MPCE	DVP 4-line serial chip enable (MPCE)/DVP slave address select
69	P23/AN23/A3	O	OPCLED	OPC LED light-up
70	P22/AN22/A2	O	INV_POW	Separately-excited inverter power control (with separately-excited-type models only)
71	P21/AN21/A1	O	VGH	Panel power control
72	P20/AN20/A0	O	POWout	DC/DC control output
73	P17/D15/INT5	I	ADPPOW	Adaptor ON/OFF input
74	P16/D14/INT4	O	DACOUTCON	Gradation control IC output control (gradation IC)
75	P15/D13/INT3	O	MP_RCS	Temperature sensor chip select
76	P14/D12	I/O	MP_RDA	Temperature sensor data input
77	P13/D11	O		
78	P12/D10	O	MP_DA	Gradation control IC data output
79	P11/D9	O	MP_CLK	Temperature sensor or gradation control IC clock output
80	P10/D8	O	DDC_RESET	Video IC reset output (Renesas DVP, 3D YC)
81	P07/AN07/D7	I	KEY4	Key input 4
82	P06/AN06/D6	I	KEY5	Key input 5
83	P05/AN05/D5	O	VLS	Panel & gradation IC power control
84	P04/AN04/D4	O		
85	P03/AN03/D3	O		
86	P02/AN02/D2	O	SHORT_DET	Over-current protection detect
87	P01/AN01/D1	I	INCH2	Screen size ID port 2
88	P00/AN00/D0	I	INCH1	Screen size ID port 1
89	P107/AN7/KI3	I	AFT	AFT voltage input
90	P106/AN6/KI2	—		
91	P105/AN5/KI1	O I	KEY1	Key input 1
92	P104/AN4/KI0	I	KEY2	Key input 2
93	P103/AN3	O		
94	P102/AN2	I	OPC_IN	OPC sensor level input
95	P101/AN1	O		
96	AVss	I	AVss	Connected to GND
97	P100/AN0	O		
98	VREF	I	VREF	Connected to +3.3V
99	AVcc	I	AVcc	Connected to +3.3V
100	P97/ADtrg/Sin4	O		

2. IC801(RH-iXB170WJZZQ)

2-1. Pin Connections



Pin Connections (Top View)

2-2. Pin Functions

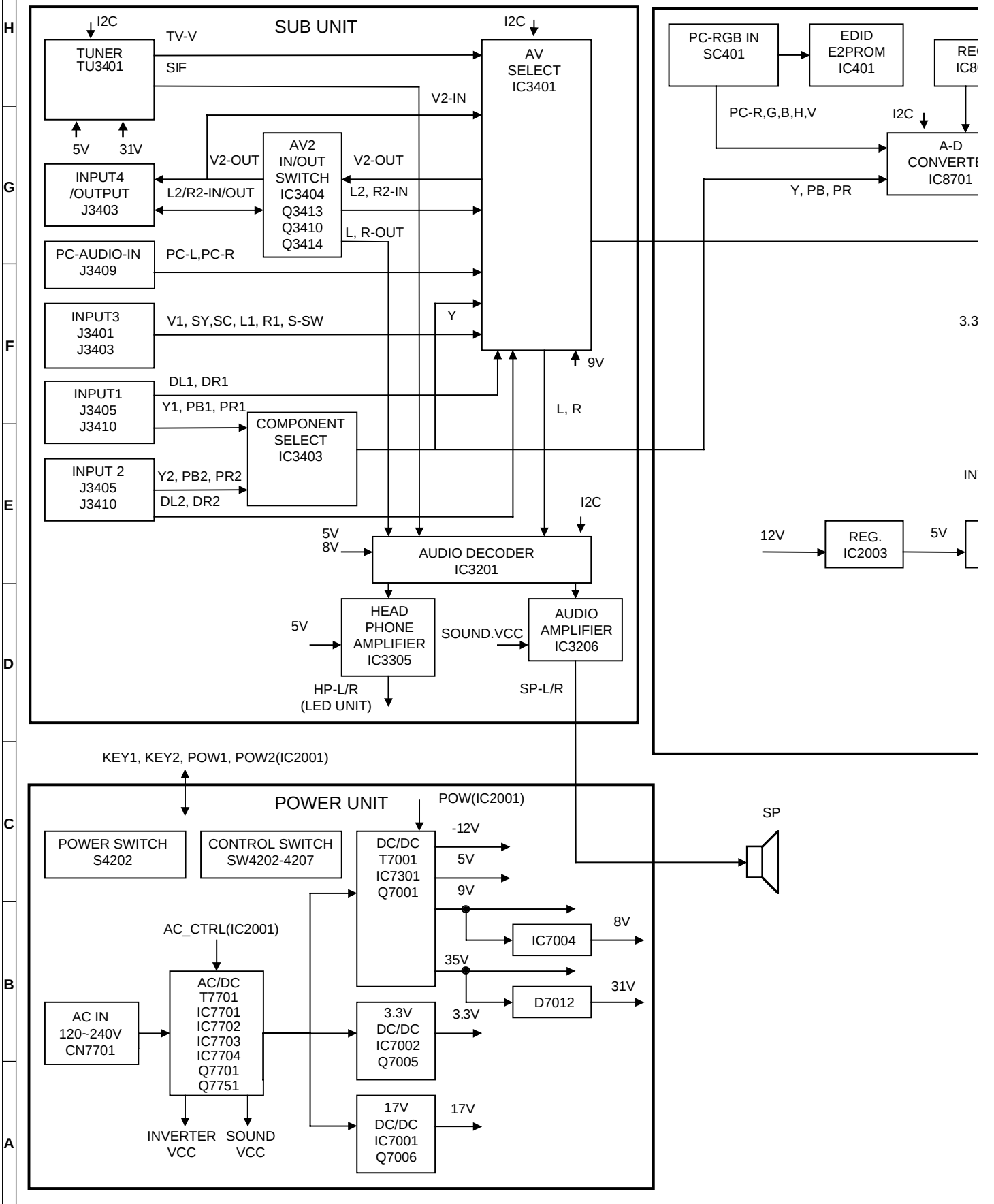
Pin No.	Pin name	Function	Pin status
1	DVDD33	Digital 3.3V power	
2	PXD24	Pixel data signal (C) input/output	Pull-up when not used
3	PXD25	Pixel data signal (C) input/output	Pull-up when not used
4	PXD26	Pixel data signal (C) input/output	Pull-up when not used
5	PXD27	Pixel data signal (C) input/output	Pull-up when not used
6	VDIN	Vertical sync signal input/output	Pull-up when not used
7	HDIN/FBIN	Horizontal sync signal input/output/FB (SCART) signal input	Pull-up when not used
8	DVDD33	Digital 3.3V power	
9	DGND	Digital GND	
10	VRPD	ADC (Dch) VRT terminal (0.1µF capacitor connected)	
11	VROD	ADC (Dch) VRM terminal (0.1µF capacitor connected)	
12	VRMD	ADC (Dch) VRB terminal (0.1µF capacitor connected)	
13	VIND	ADC (Dch) analog input 1 (CVBS)	
14	AVDDD2	ADC analog 3.3V power	
15	AVSSD2	ADC analog GND	
16	AVDDD1	ADC analog 3.3V power	
17	AVSSD1	ADC analog GND	
18	VRPC	ADC (Cch) VRT terminal (0.1µF capacitor connected)	
19	VROC	ADC (Cch) VRM terminal (0.1µF capacitor connected)	
20	VRMC	ADC (Cch) VRB terminal (0.1µF capacitor connected)	
21	VINC	ADC (Cch) analog input 1 (COMP-Pr/R)	
22	AVDDC2	ADC analog 3.3V power	
23	AVSSC2	ADC analog GND	
24	AVDDC1	ADC analog 3.3V power	
25	AVSSC1	ADC analog GND	
26	DVDD	ADC digital 3.3V power	
27	DVSS	ADC digital GND	
28	VRPB	ADC (Bch) VRT terminal (0.1µF capacitor connected)	
29	VROB	ADC (Bch) VRM terminal (0.1µF capacitor connected)	
30	VRMB	ADC (Bch) VRB terminal (0.1µF capacitor connected)	
31	VIN1B	ADC (Bch) analog input 1 (YC-C)	
32	AVDDB2	ADC analog 3.3V power	
33	VIN2B	ADC (Bch) analog input 2 (COMP-Pb/B)	
34	AVSSB2	ADC analog GND	
35	AVDDB1	ADC digital 3.3V power	
36	AVSSB1	ADC digital GND	
37	VRPA	ADC (Ach) VRT terminal (0.1µF capacitor connected)	
38	VROA	ADC (Ach) VRM terminal (0.1µF capacitor connected)	
39	VRMA	ADC (Ach) VRB terminal (0.1µF capacitor connected)	
40	VIN1A	ADC (Ach) analog input 1 (CVBS1)	
41	AVDDA2	ADC analog 3.3V power	
42	VIN2A	ADC (Ach) analog input 2 (YC-Y)	
43	AVSSA2	ADC analog GND	
44	VIN3A	ADC (Ach) analog input 3 (COM-Y/G)	
45	AVDDA1	ADC analog 3.3V power	
46	AVSSA1	ADC analog GND	
47	SVSS	Analog guard ring GND	
48	DVDD33	Digital 3.3V power	
49	DGND	Digital GND	
50	RESET	Reset signal input	
51	QOECTL	Try state control for panel output line control signal '0': Normal output, '1': High impedance	
52	HDIN2	Line 2's HD input	Pull-up when not used
53	VDIN2	Line 2's VD input	Pull-up when not used
54	DVDD33	Digital 3.3V power	
55	DGND	Digital GND	
56	DVDD 18	Digital 1.8V power	
57	MPWEH	MPSEL0='1' setting (parallel bus): Write enable upper (negative polarity) MPSEL0='0' setting (4-line serial bus) MST: Serial clock input	Pull-up when not used

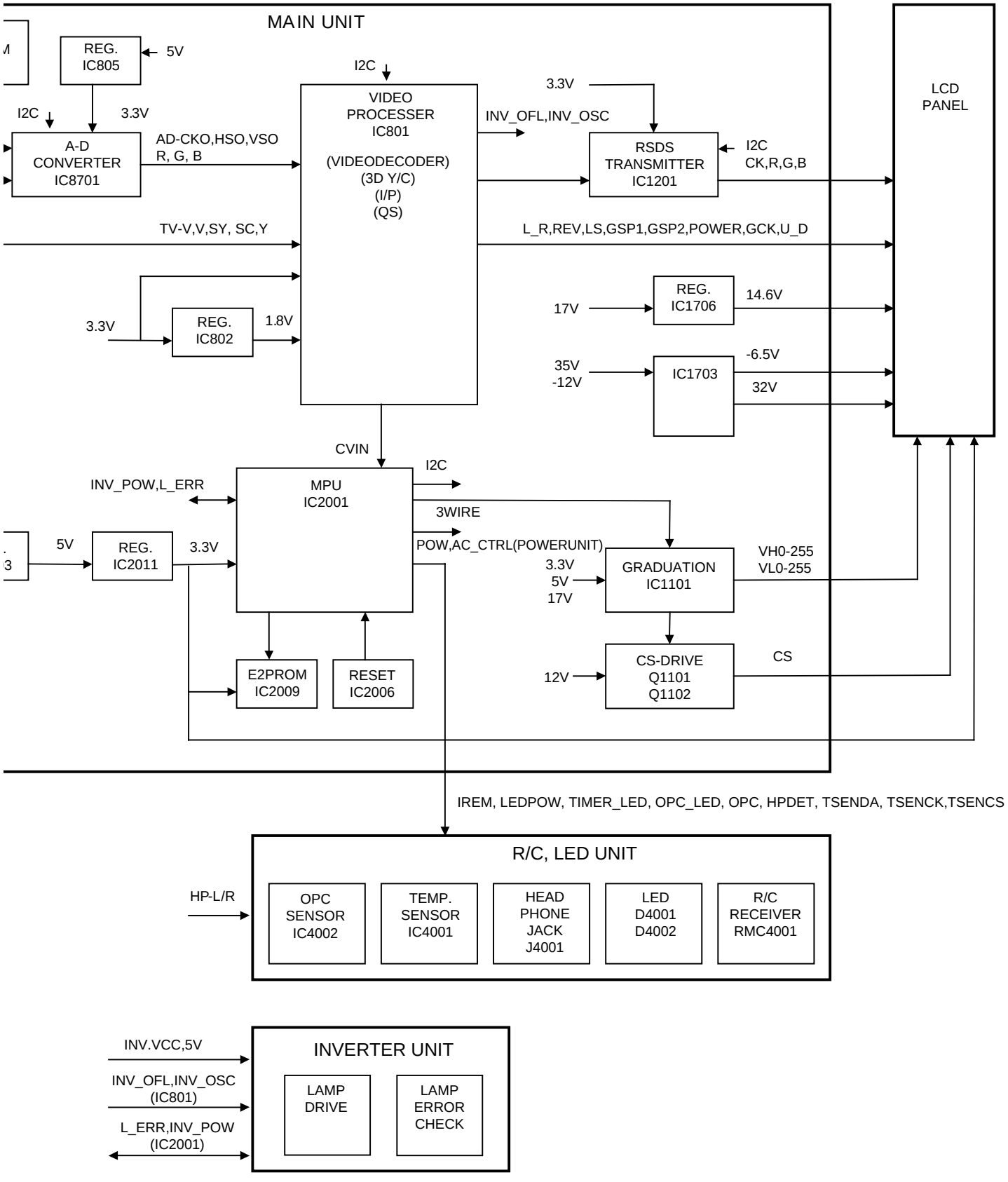
Pin No.	Pin name	Function	Pin status
58	MPWEL	MPSEL0='1' setting (parallel bus): Write enable lower (negative polarity) MPSEL0='0' setting (4-line serial bus) MSD: Serial data input	Pull-up when not used
59	MPOE	MPSEL0='1' setting (parallel bus): Output enable (negative polarity) MPSEL0='0' setting (4-line serial bus) MSQ: Serial data output	Pull-up when not used
60	MPCE	MPSEL0='1' setting (parallel bus): Chip enable (negative polarity) MPSEL0='0' setting (4-line serial bus) MSN: Serial select	Pull-up when not used
61	MPAH/PCXLK1	(Parallel bus) address latch enable (negative polarity)/ITU-R656 clock input	
62	DVDDSD	Digital 3.3V power	
63	MDQ15/C656IN7	MPSEL0='1' setting: Data input/output (address input) '0' setting: Microprocessor expander/ITU-R656 input	Pull-up when not used
64	MDQ14/C656IN6	MPSEL0='1' setting: Data input/output (address input) '0' setting: Microprocessor expander/ITU-R656 input	Pull-up when not used
65	MDQ13/C656IN5	MPSEL0='1' setting: Data input/output (address input) '0' setting: Microprocessor expander/ITU-R656 input	Pull-up when not used
66	MDQ12/C656IN4	MPSEL0='1' setting: Data input/output (address input) '0' setting: Microprocessor expander/ITU-R656 input	Pull-up when not used
67	MDQ11/C656IN3	MPSEL0='1' setting: Data input/output (address input) '0' setting: Microprocessor expander/ITU-R656 input	Pull-up when not used
68	DVDD3.3	Digital 3.3V power	
69	DGND	Digital GND	
70	DVDD1.8	Digital 1.8V power	
71	MDQ10/C656IN2	MPSEL0='1' setting: Data input/output (address input) '0' setting: Microprocessor expander/ITU-R656 input	Pull-up when not used
72	MDQ9/C656IN1	MPSEL0='1' setting: Data input/output (address input) '0' setting: Microprocessor expander/ITU-R656 input	Pull-up when not used
73	MDQ8/C656IN0	MPSEL0='1' setting: Data input/output (address input) '0' setting: Microprocessor expander/ITU-R656 input	Pull-up when not used
74	MDQ7/C656OUT7	MPSEL0='1' setting: Data input/output (address input) '0' setting: Microprocessor expander/ITU-R656 input	Pull-up when not used
75	MDQ6/C656OUT6	MPSEL0='1' setting: Data input/output (address input) '0' setting: Microprocessor expander/ITU-R656 input	Pull-up when not used
76	MDQ5/C656OUT5	MPSEL0='1' setting: Data input/output (address input) '0' setting: Microprocessor expander/ITU-R656 input	Pull-up when not used
77	MDQ4/C656OUT4	MPSEL0='1' setting: Data input/output (address input) '0' setting: Microprocessor expander/ITU-R656 input	Pull-up when not used
78	MDQ3/C656OUT3	MPSEL0='1' setting: Data input/output (address input) '0' setting: Microprocessor expander/ITU-R656 input	Pull-up when not used
79	MDQ2/C656OUT2	MPSEL0='1' setting: Data input/output (address input) '0' setting: Microprocessor expander/ITU-R656 input	Pull-up when not used
80	MDQ1/C656OUT1	MPSEL0='1' setting: Data input/output (address input) '0' setting: Microprocessor expander/ITU-R656 input	Pull-up when not used
81	DVDDSD	Digital 3.3V power	
82	DGND	Digital GND	
83	MPSEL0	Parallel/serial bus type selection '0': 4-line serial bus, '1': /Multiplex parallel	
84	XIN	Oscillation buffer input	
85	XOUT	Oscillation buffer output	
86	MPSEL1	MPSEL0='0' setting: '0': 4-line serial bus	
87	MDQ0/C656OUT0	MPSEL0='1' setting: Data input/output (address input) '0' setting: Microprocessor expander/ITU-R656 output	
88	QE/PXCLK0	Panel data enable signal output/ITU-R656 clock output	
89	QH	Panel horizontal sync signal output	
90	QV	Panel vertical sync signal output	
91	QDRVHA/QOE	Panel driver signal output A (variable horizontal period)/Panel data enable signal output	
92	DVDD33	Digital 3.3V power	
93	DGND	Digital GND	
94	DVDD18	Digital 1.8V power	
95	QDRVHB	Panel driver signal output B (variable horizontal period)	
96	QDRVHC	Panel driver signal output C (variable horizontal period)	

Pin No.	Pin name	Function	Pin status
97	QDRVHD	Panel driver signal output D (variable horizontal period)	
98	QDRVHE	Panel driver signal output E (variable horizontal period)	
99	DVDD33	Digital 3.3V power	
100	DGND	Digital GND	
101	DVDDSD	Digital 3.3V power	
102	QDRVHF	Panel driver signal output F (variable horizontal period)	
103	QDRVVA	Panel driver signal output A (variable vertical period)	
104	QDRVVB	Panel driver signal output B (variable vertical period)	
105	QCLKL	Panel clock signal output (L)	
106	QGL0	Panel G signal (L) output	
107	DVDD18	Digital 1.8V power	
108	DGND	Digital GND	
109	DVDD33	Digital 3.3V power	
110	TEST0	Test signal input 1	Connected to GND
111	LPF1	PLL1 (panel clock) LPF terminal	
112	TEST1	Test signal input 2	Connected to GND
113	QGL1	Panel G signal (L) output	
114	QGL2	Panel G signal (L) output	
115	QGL3	Panel G signal (L) output	
116	QGL4	Panel G signal (L) output	
117	DVDD33	Digital 3.3V power	
118	DGND	Digital GND	
119	QGL5	Panel G signal (L) output	
120	QGL6	Panel G signal (L) output	
121	QGL7	Panel G signal (L) output	
122	QBL0	Panel B signal (L) output	
123	QBL1	Panel B signal (L) output	
124	DVDD18	Digital 1.8V power	
125	DGND	Digital GND	
126	DVDD33	Digital 3.3V power	
127	QBL2	Panel B signal (L) output	
128	QBL3	Panel B signal (L) output	
129	QBL4	Panel B signal (L) output	
130	QBL5	Panel B signal (L) output	
131	QBL6	Panel B signal (L) output	
132	QBL7	Panel B signal (L) output	
133	QRL0	Panel R signal (L) output	
134	QRL1	Panel R signal (L) output	
135	QRL2	Panel R signal (L) output	
136	DVDD18	Digital 1.8V power	
137	DGND	Digital GND	
138	DVDD33	Digital 3.3V power	
139	QRL3	Panel R signal (L) output	
140	QRL4	Panel R signal (L) output	
141	QRL5	Panel R signal (L) output	
142	QRL6	Panel R signal (L) output	
143	QRL7	Panel R signal (L) output	
144	QCLKR	Panel clock signal output (R)	
145	QGR0	Panel G signal (R) output	
146	QGR1	Panel G signal (R) output	
147	DVDD18	Digital 1.8V power	
148	DGND	Digital GND	
149	DVDD33	Digital 3.3V power	
150	QGR2	Panel G signal (R) output	
151	QGR3	Panel G signal (R) output	
152	QGR4	Panel G signal (R) output	
153	QGR5	Panel G signal (R) output	
154	QGR6	Panel G signal (R) output	
155	QGR7	Panel G signal (R) output	
156	DVDD33	Digital 3.3V power	

Pin No.	Pin name	Function	Pin status
157	DGND	Digital GND	
158	QBR0	Panel B signal (R) output	
159	QBR1	Panel B signal (R) output	
160	QBR2	Panel B signal (R) output	
161	QBR3	Panel B signal (R) output	
162	DVDD33	Digital 3.3V power	
163	DGND	Digital GND	
164	DVDD18	Digital 1.8V power	
165	QBR4	Panel B signal (R) output	
166	QBR5	Panel B signal (R) output	
167	QBR6	Panel B signal (R) output	
168	QBR7	Panel B signal (R) output	
169	QRR0	Panel R signal (R) output	
170	DVDDSD	Digital 3.3V power	
171	DGND	Digital GND	
172	DVDD33	Digital 3.3V power	
173	QRR1	Panel R signal (R) output	
174	QRR2	Panel R signal (R) output	
175	QRR3	Panel R signal (R) output	
176	DVDD18	Digital 1.8V power	
177	DGND	Digital GND	
178	DVDD33	Digital 3.3V power	
179	QRR4	Panel R signal (R) output	
180	QRR5	Panel R signal (R) output	
181	QRR6	Panel R signal (R) output	
182	QRR7	Panel R signal (R) output	
183	TSTCLK	Test clock signal input	Pull-down when not used
184	QBLCA	Backlight signal A	
185	QBLCB	Backlight signal B	
186	QBLCC	Backlight signal C	
187	QBLCD	Backlight signal D	
188	DGND	Digital GND	
189	DVDDSD	Digital 3.3V power	
190	PXCLK	Pixel clock signal input	Pull-up when not used
191	PXD00	Pixel data signal (A) input/output	Pull-up when not used
192	PXD01	Pixel data signal (A) input/output	Pull-up when not used
193	PXD02	Pixel data signal (A) input/output	Pull-up when not used
194	PXD03	Pixel data signal (A) input/output	Pull-up when not used
195	PXD04	Pixel data signal (A) input/output	Pull-up when not used
196	PXD05	Pixel data signal (A) input/output	Pull-up when not used
197	DVDD18	Digital 1.8V power	
198	DGND	Digital GND	
199	DVDD33	Digital 3.3V power	
200	PXD06	Pixel data signal (A) input/output	Pull-up when not used
201	PXD07	Pixel data signal (A) input/output	Pull-up when not used
202	PXD10	Pixel data signal (B) input/output	Pull-up when not used
203	PXD11	Pixel data signal (B) input/output	Pull-up when not used
204	PXD12	Pixel data signal (B) input/output	Pull-up when not used
205	PXD13	Pixel data signal (B) input/output	Pull-up when not used
206	PXD14	Pixel data signal (B) input/output	Pull-up when not used
207	DVDDSD	Digital 3.3V power	
208	PXD15	Pixel data signal (B) input/output	Pull-up when not used
209	PXD16	Pixel data signal (B) input/output	Pull-up when not used
210	PXD17	Pixel data signal (B) input/output	Pull-up when not used
211	PXD20	Pixel data signal (C) input/output	Pull-up when not used
212	PXD21	Pixel data signal (C) input/output	Pull-up when not used
213	PXD22	Pixel data signal (C) input/output	Pull-up when not used
214	PXD23	Pixel data signal (C) input/output	Pull-up when not used
215	DVDD18	Digital 1.8V power	
216	DGND	Digital GND	

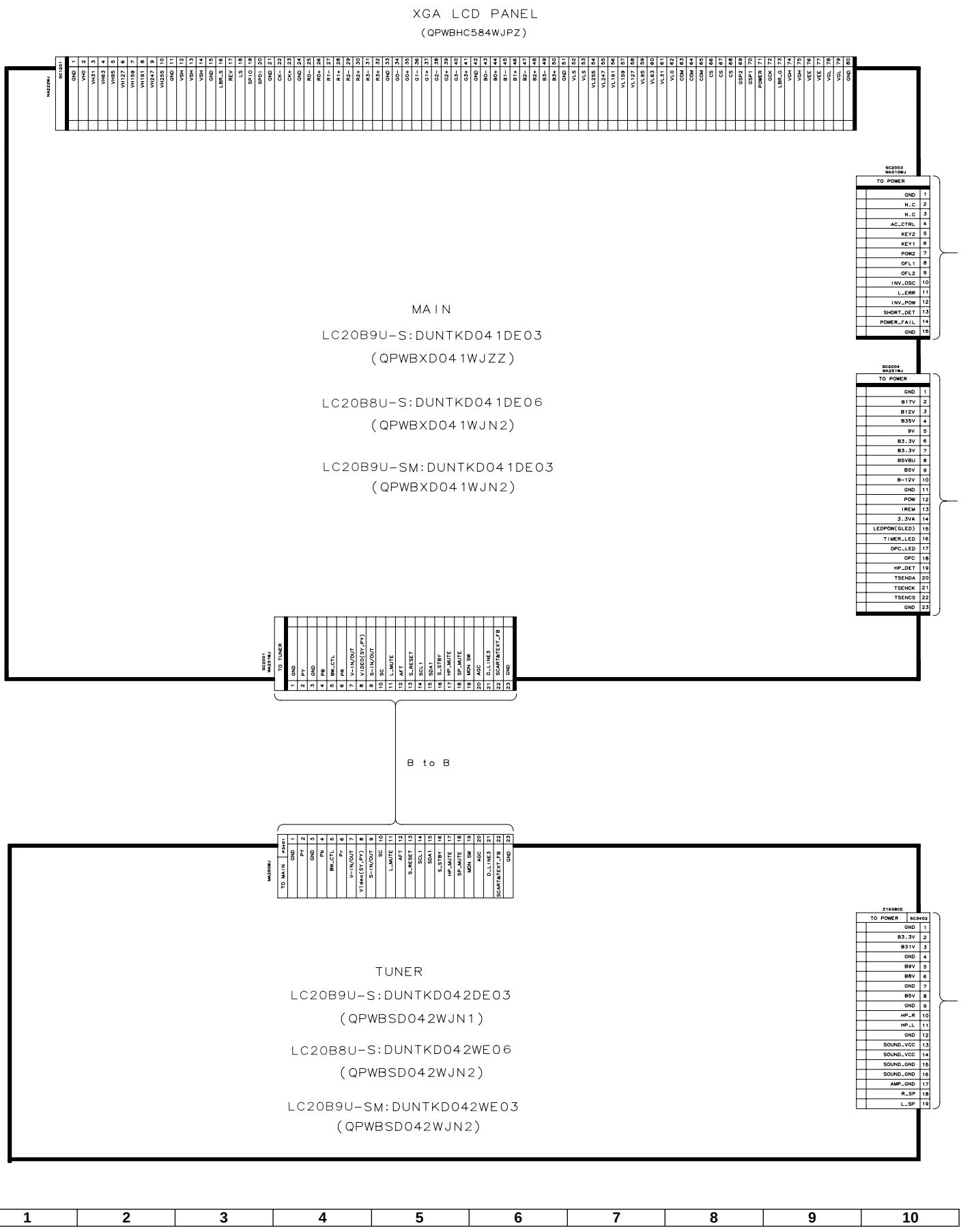
BLOCK DIAGRAM

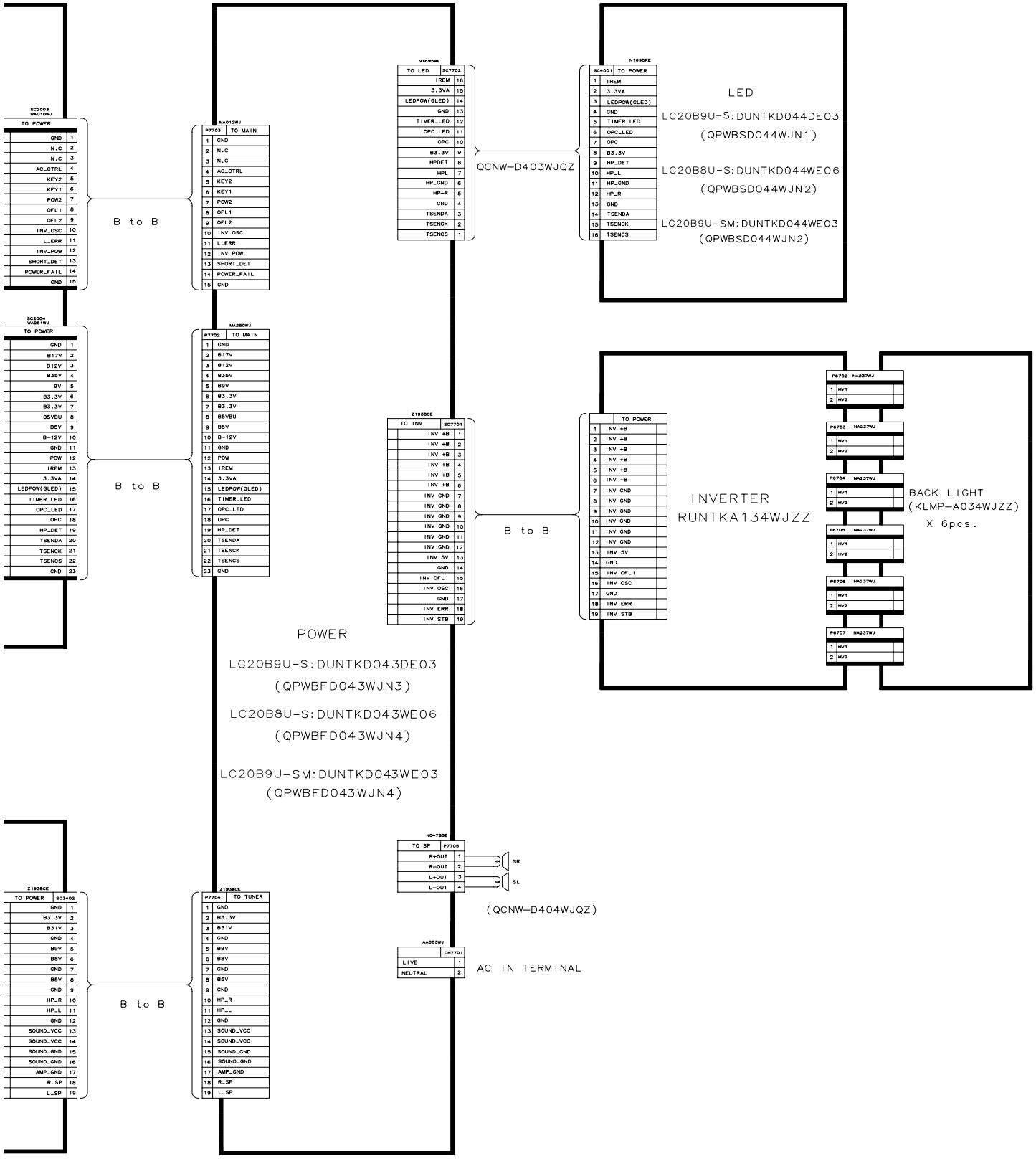




10	11	12	13	14	15	16	17	18	19

OVERALL WIRING DIAGRAM





10	11	12	13	14	15	16	17	18	19

DESCRIPTION OF SCHEMATIC DIAGRAM

VOLTAGE MEASUREMENT CONDITION:

1. The voltages at test points are measured on the stable supply voltage of AC 120V. Signals are fed by a color bar signal generator for servicing purpose and the above voltages are measured with a 20k ohm/V tester.

INDICATION OF RESISTOR & CAPACITOR:

RESISTOR

1. The unit of resistance "Ω" is omitted. (K=kΩ=1000 Ω, M=MΩ).
2. All resistors are ± 5%, unless otherwise noted. (K= ± 10%, F= ± 1%, D= ± 0.5%)
3. All resistors are 1/16W, unless otherwise noted.

CAPACITOR

1. All capacitors are μF, unless otherwise noted. (P=pF=μμF).
2. All capacitors are 50V, unless otherwise noted.

CAUTION:
This circuit diagram is original one, therefore there may be a slight difference from yours.

SAFETY NOTES:

1.DISCONNECT THE AC PLUG FROM THE AC OUTLET BEFORE REPLACING PARTS.
2.SEMICONDUCTOR HEAT SINKS SHOULD BE REGARDED AS POTENTIAL SHOCK HAZARDS WHEN THE CHASSIS IS OPERATING.

IMPORTANT SAFETY NOTICE:

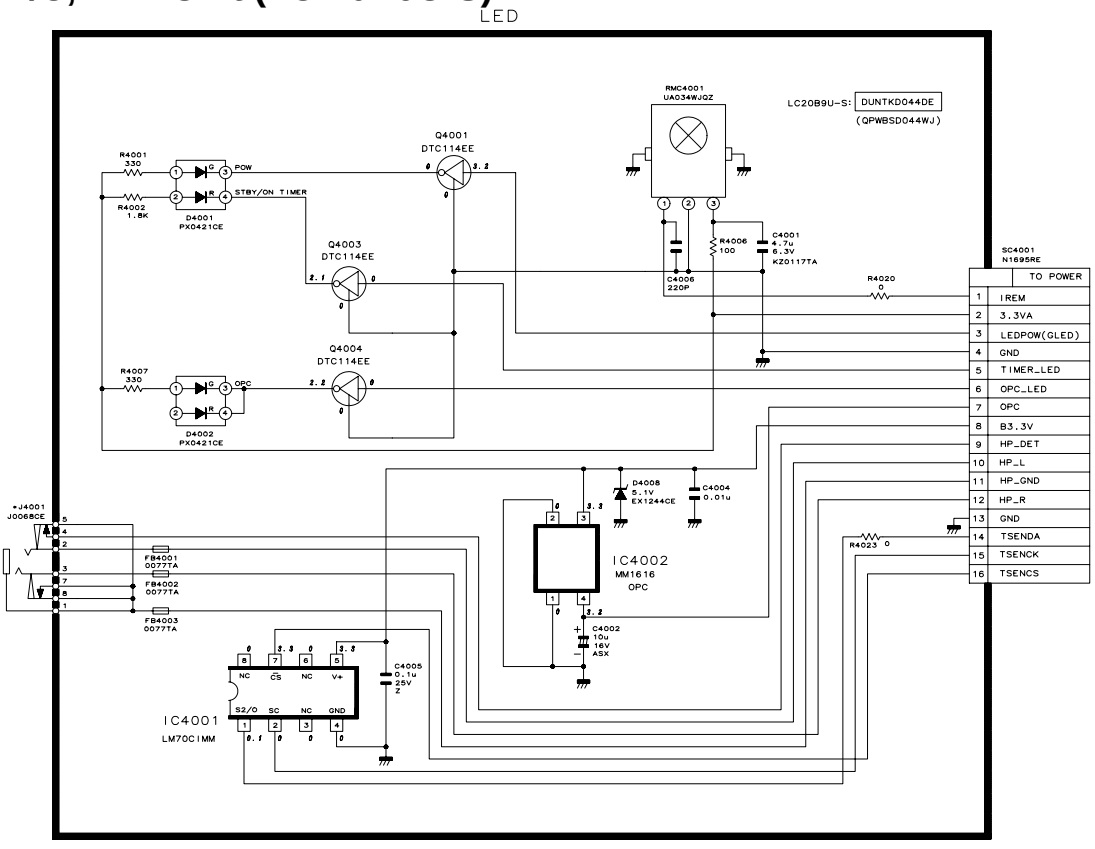
PARTS MARKED WITH "⚠" ( ) ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

AVIS DE SECURITE IMPORTANT:

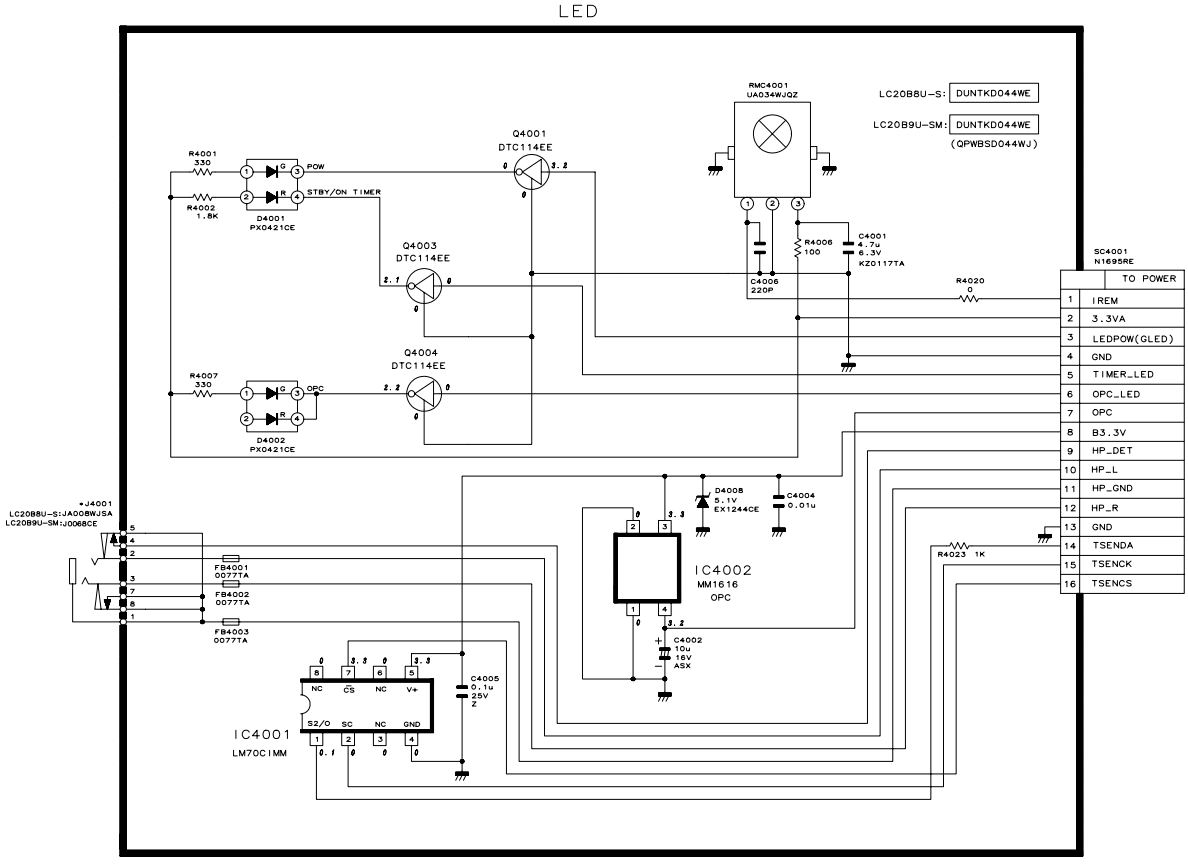
LES PIECES MARQUEES "⚠" ( )SONT IMPORTANTES POUR MAINTENIR LA SECURITE DE L'APPAREIL.
NE REMPLACER CES PIEDES QUE PAR DES PIECES DONT LE NUMERO EST SPECIFIE POUR MAINTENIR LA SECURITE ET PROTEGER LE BON FONCTIONNEMENT DE L'APPAREIL.

SCHEMATIC DIAGRAM

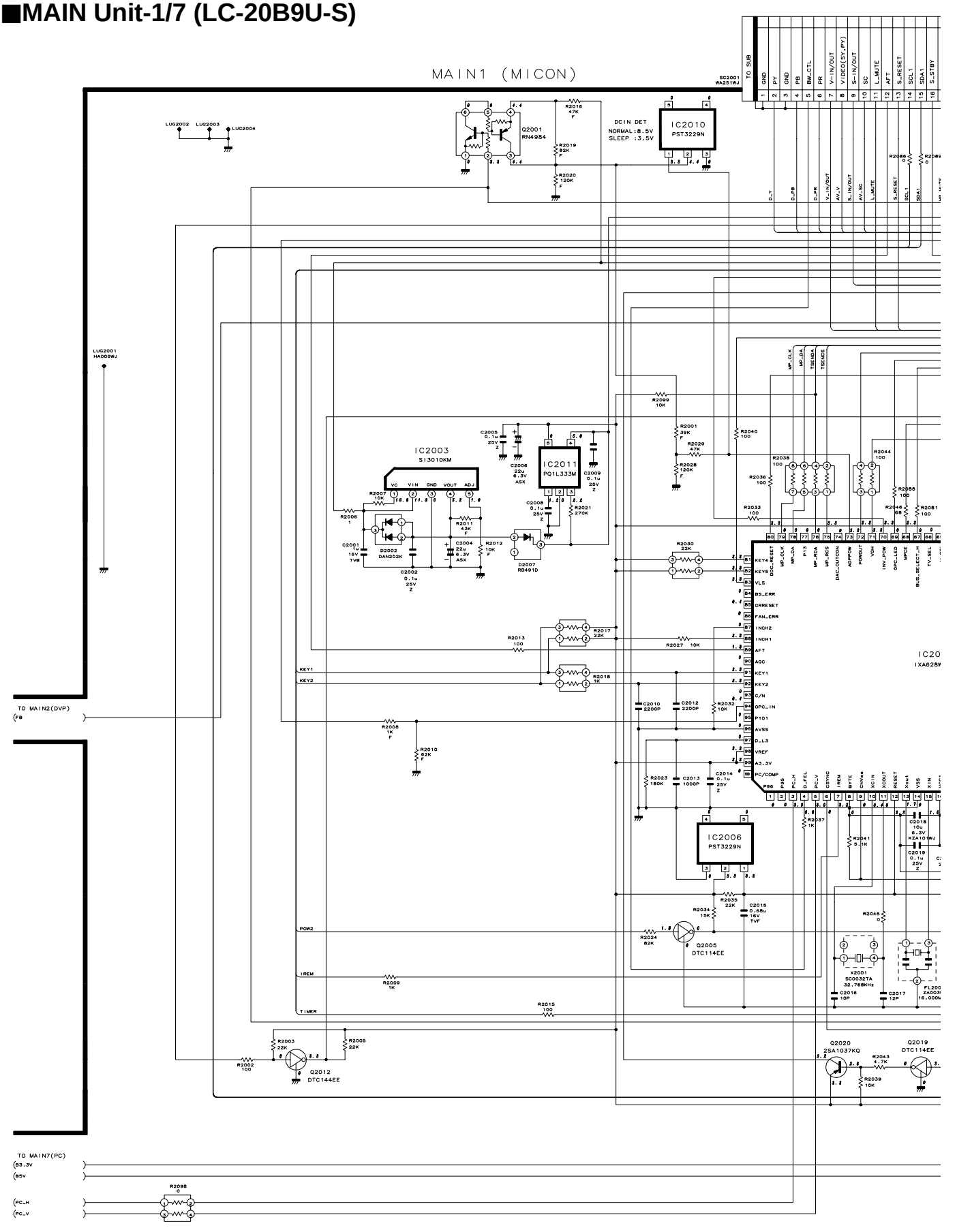
■ R/C, LED Unit (LC-20B9U-S)

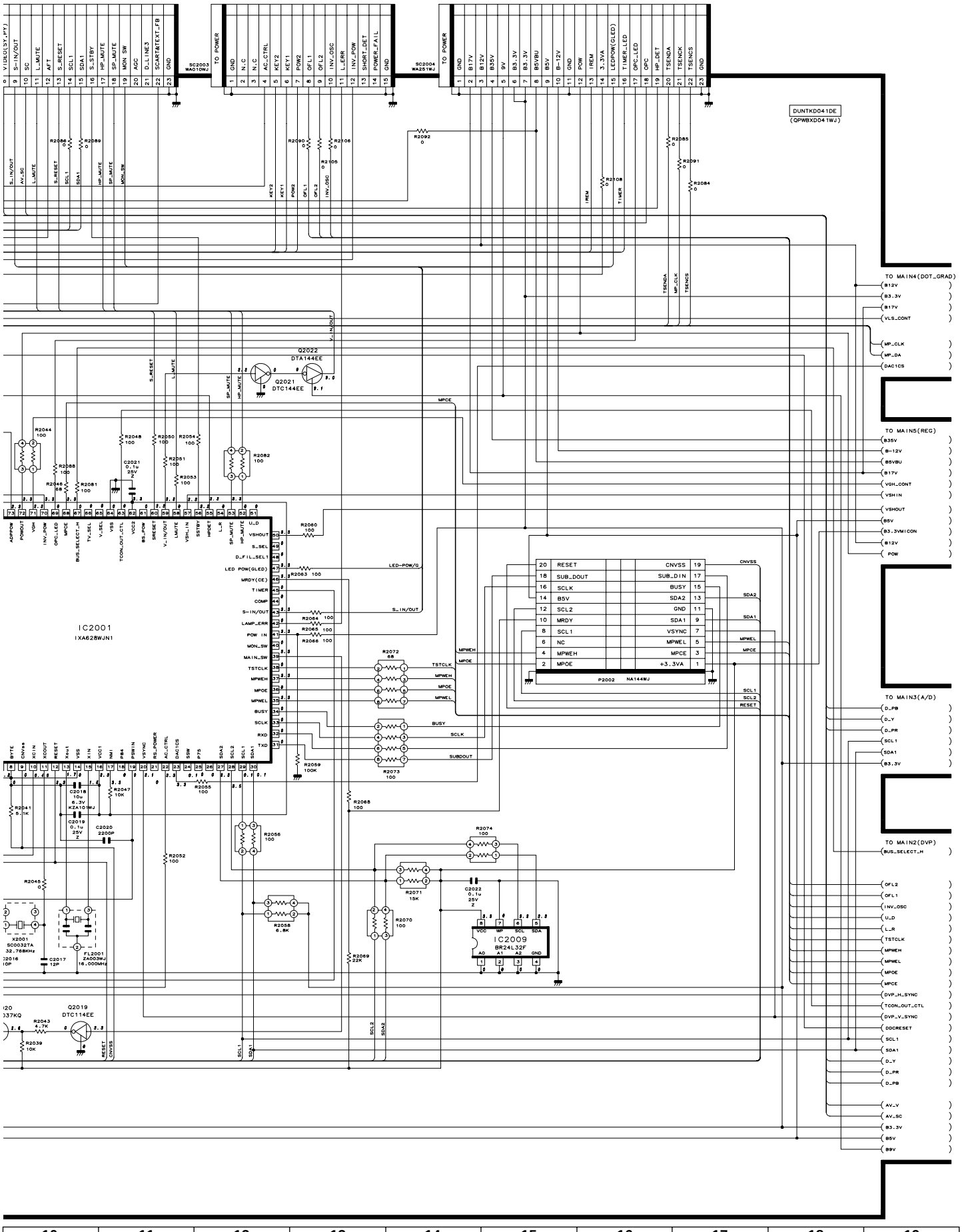


■ R/C, LED Unit (LC-20B8U-S, LC-20B9U-SM)



■MAIN Unit-1/7 (LC-20B9U-S)





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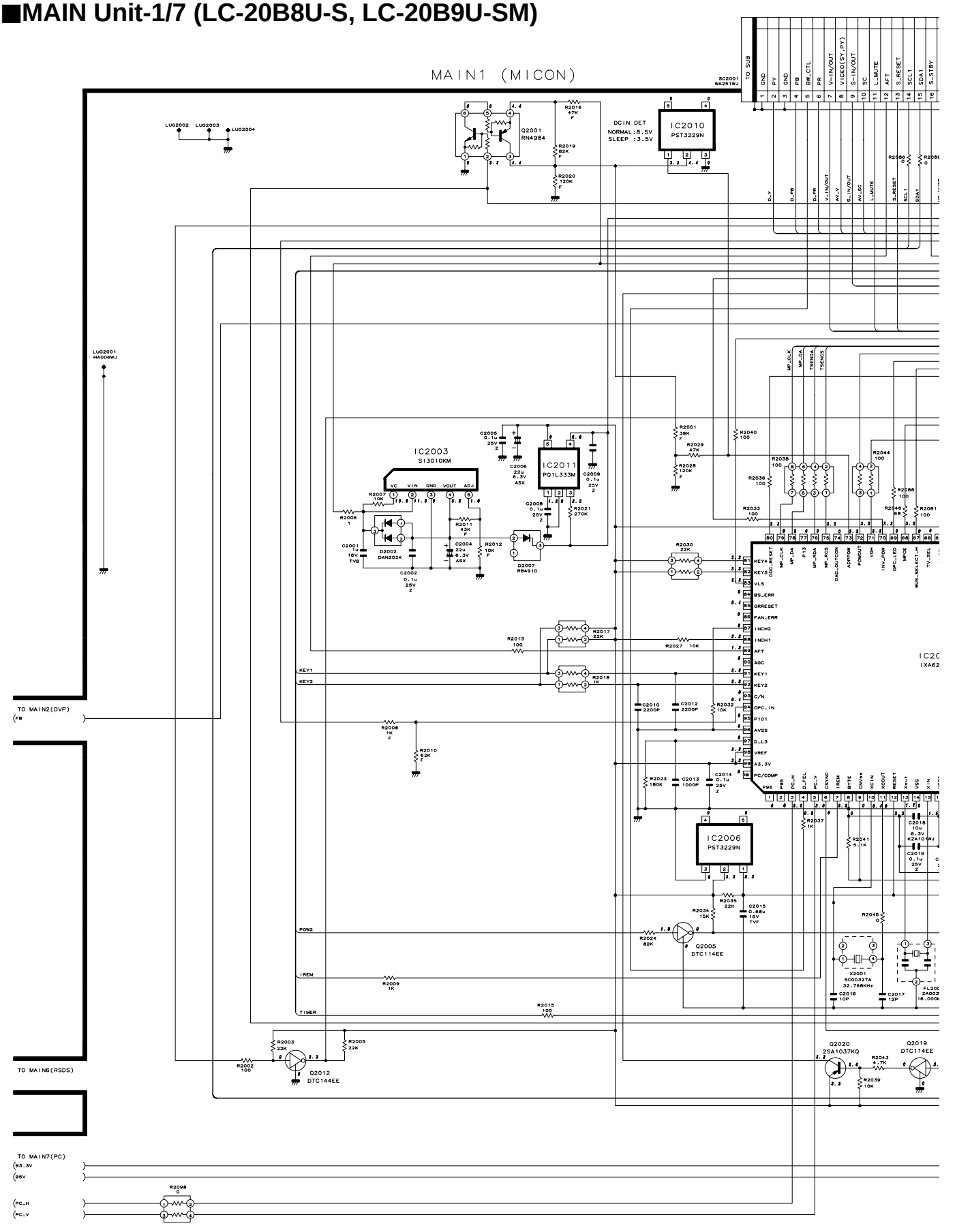
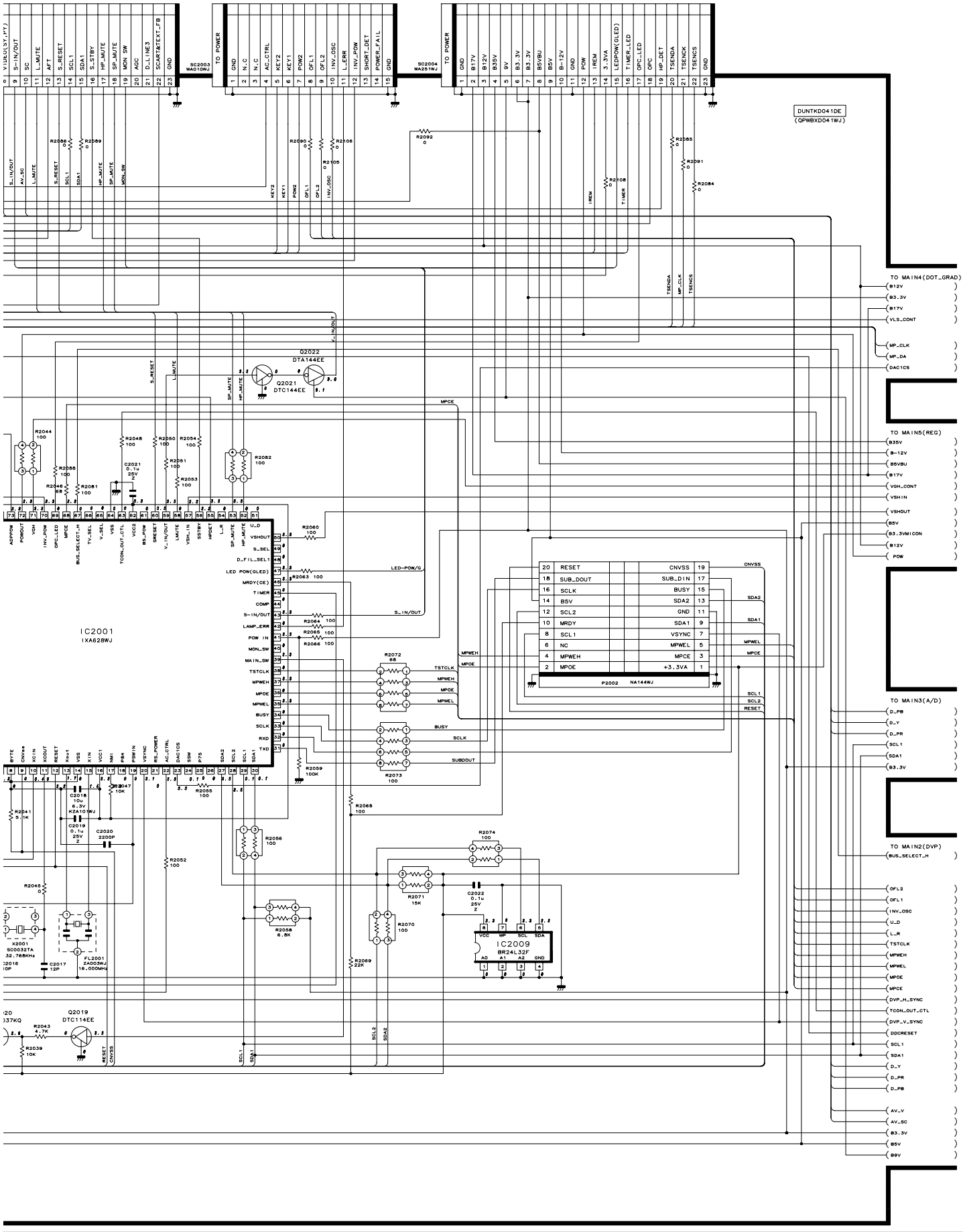
■MAIN Unit-1/7 (LC-20B8U-S, LC-20B9U-SM)

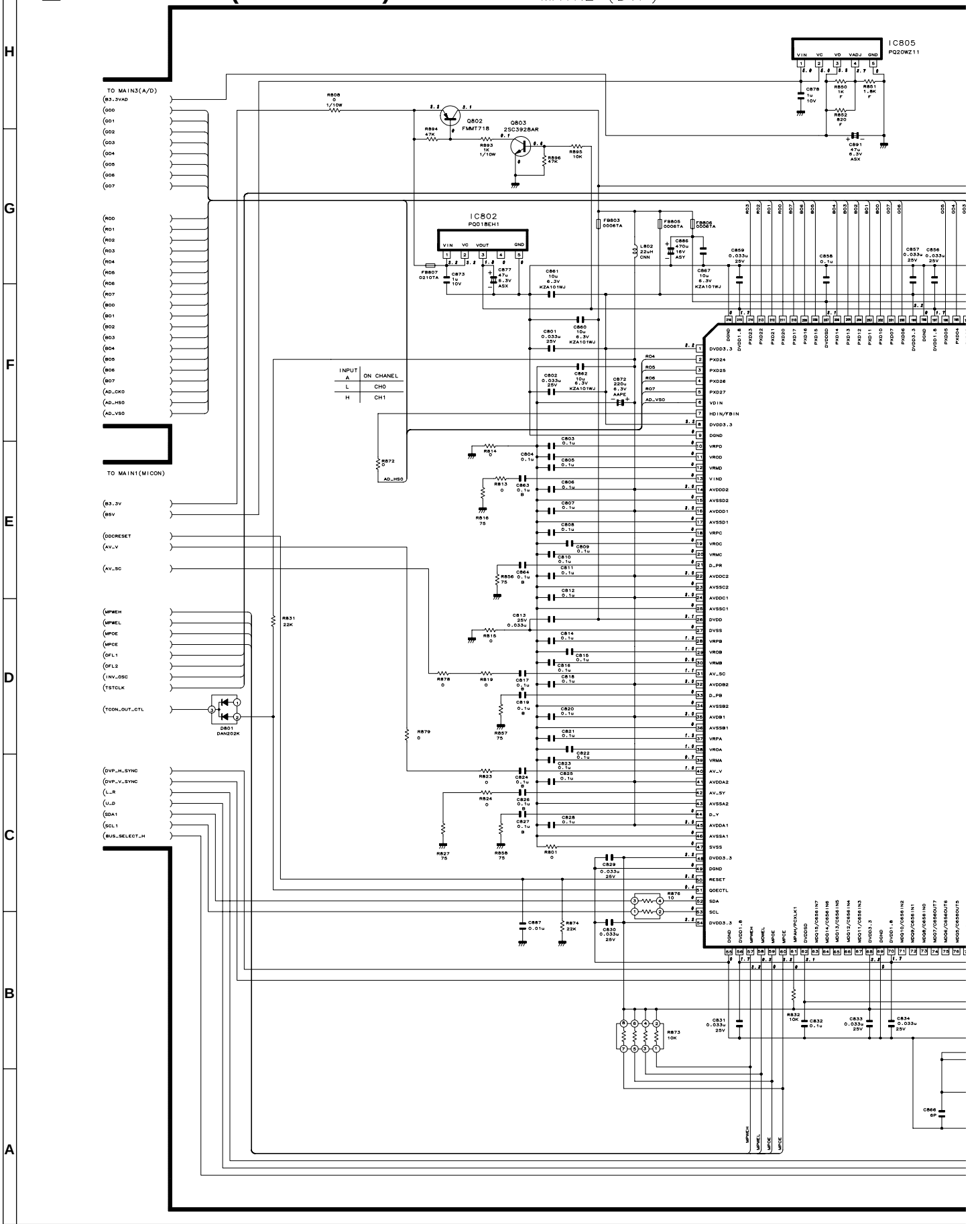


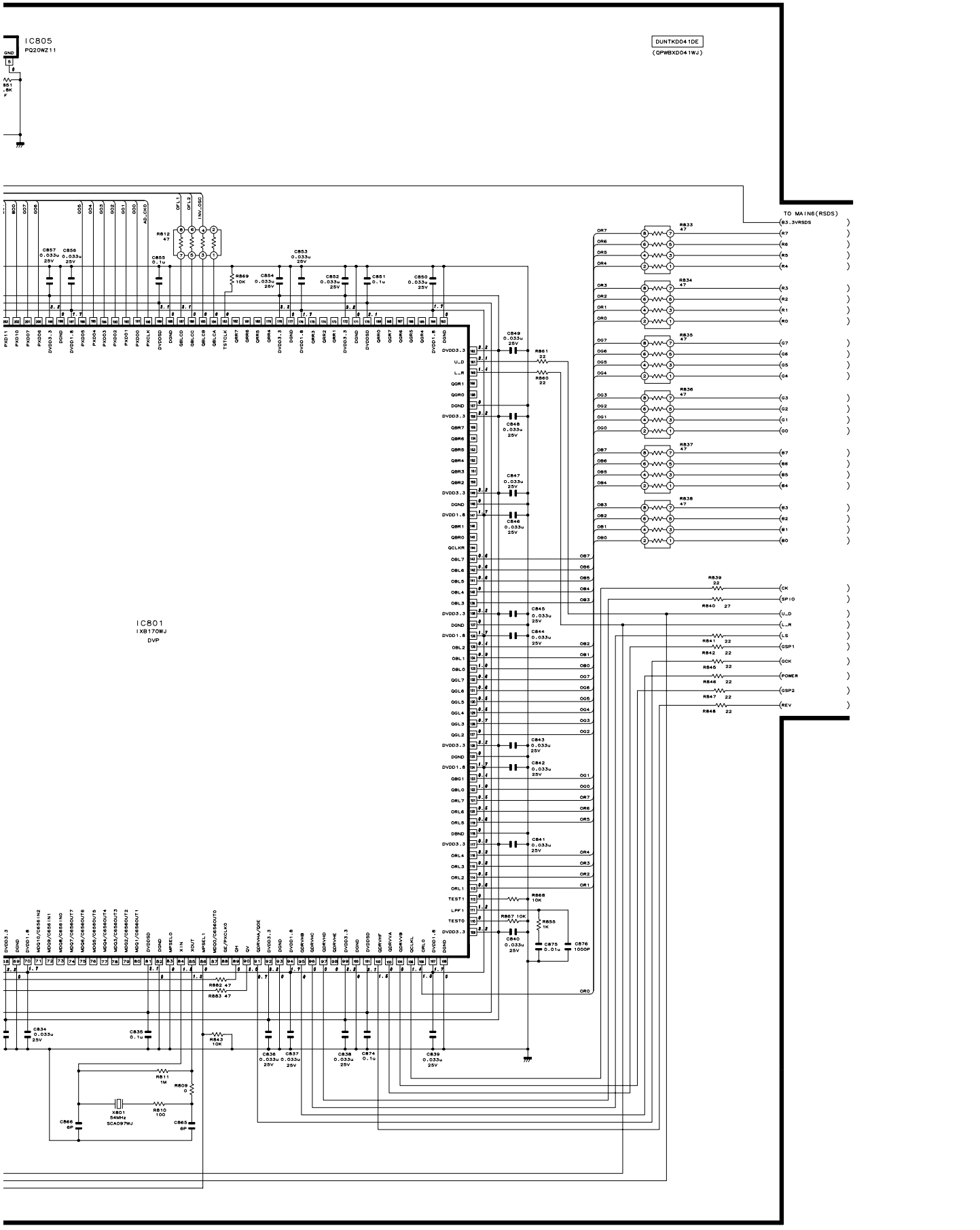


10	11	12	13	14	15	16	17	18	19

■MAIN Unit-2/7 (LC-20B9U-S)

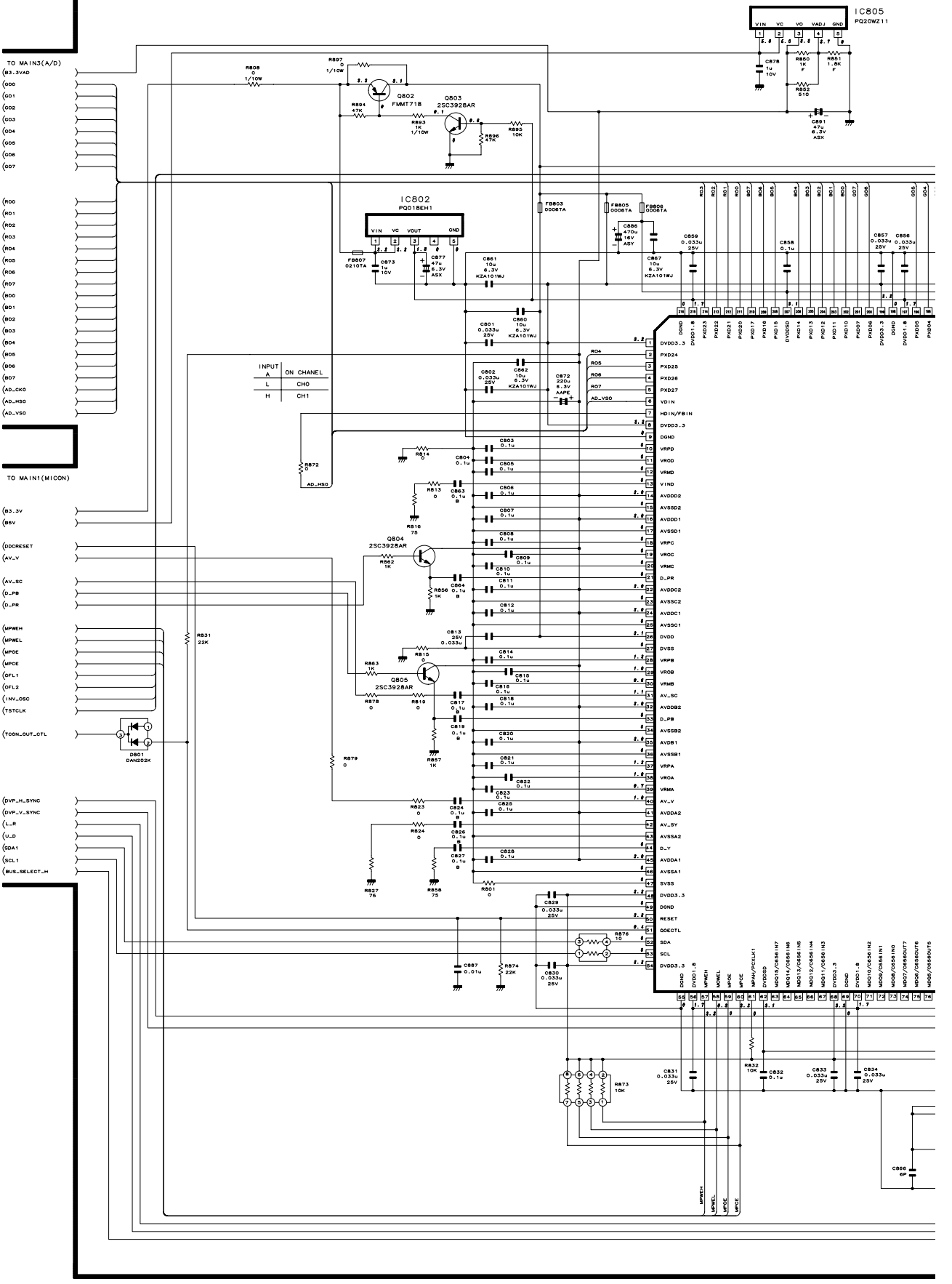
MAIN2 (DVP)

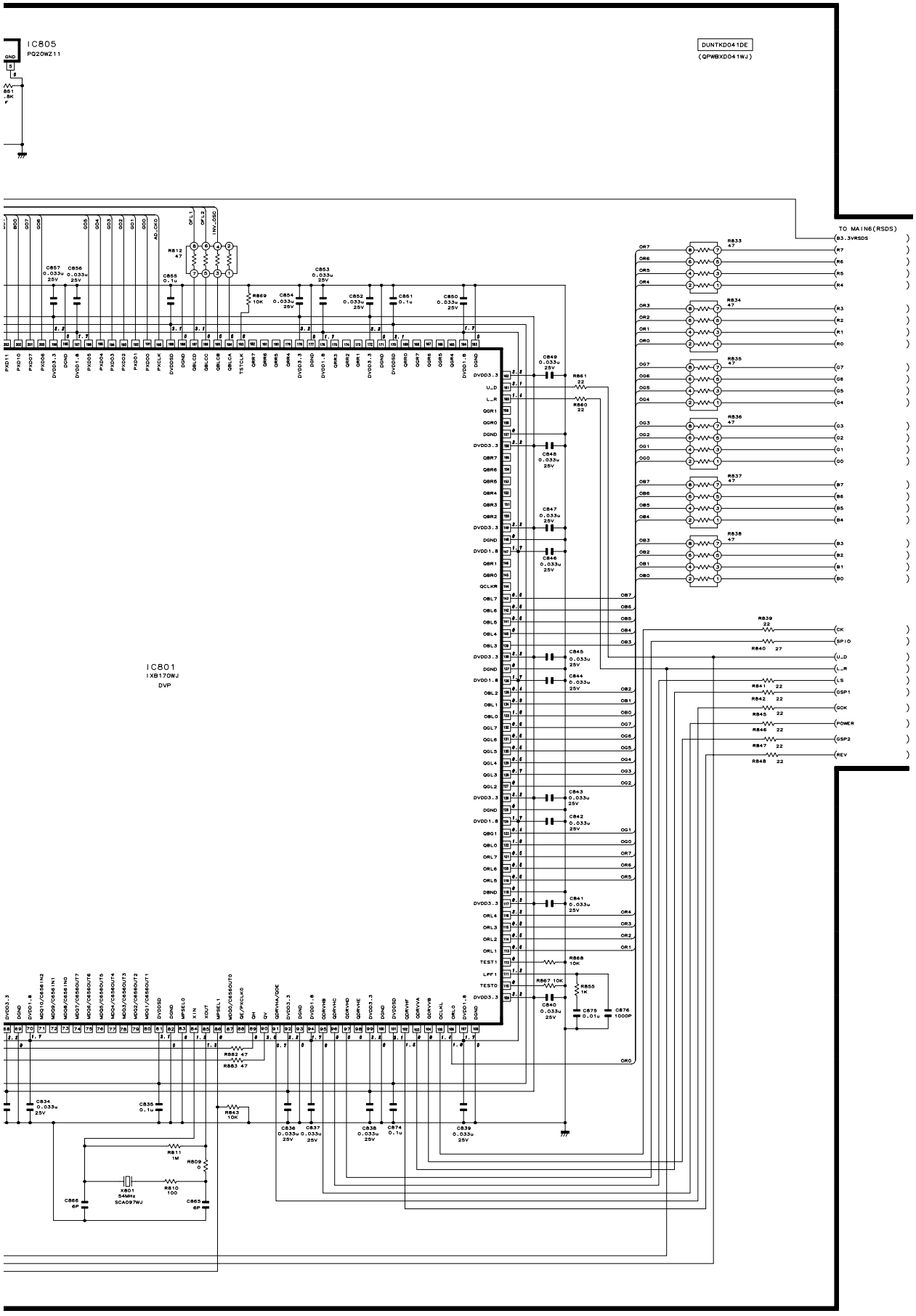



IC805
PQ20WZ11
DUNTKD041DE
(QPWBXD041WJ)
IC801
IXB170WJ
DVP
TO MAIN6(RSDS)
X801
54MHz
SCA097WJ

■MAIN Unit-2/7 (LC-20B8U-S, LC-20B9U-SM)

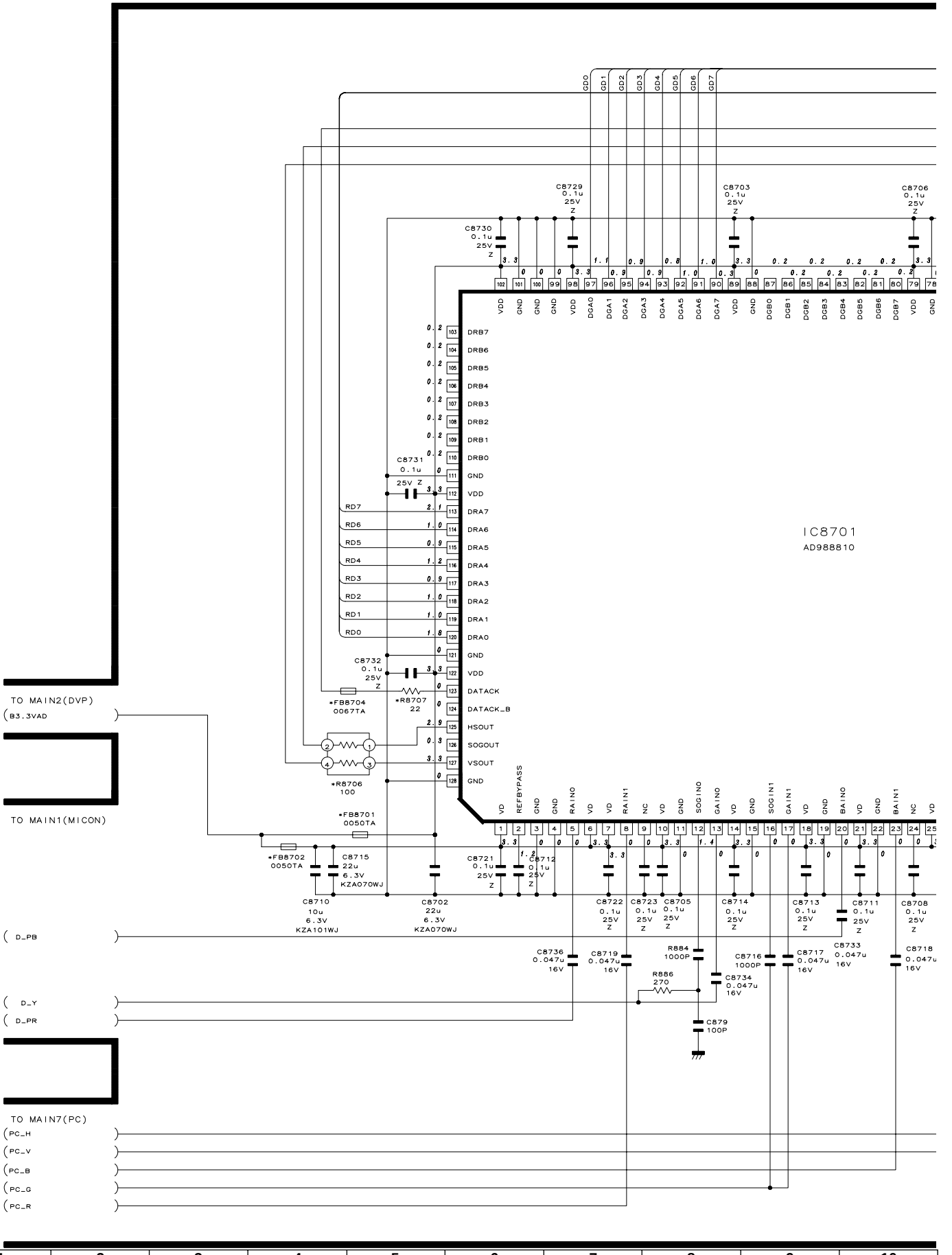
MAIN2 (DVP)

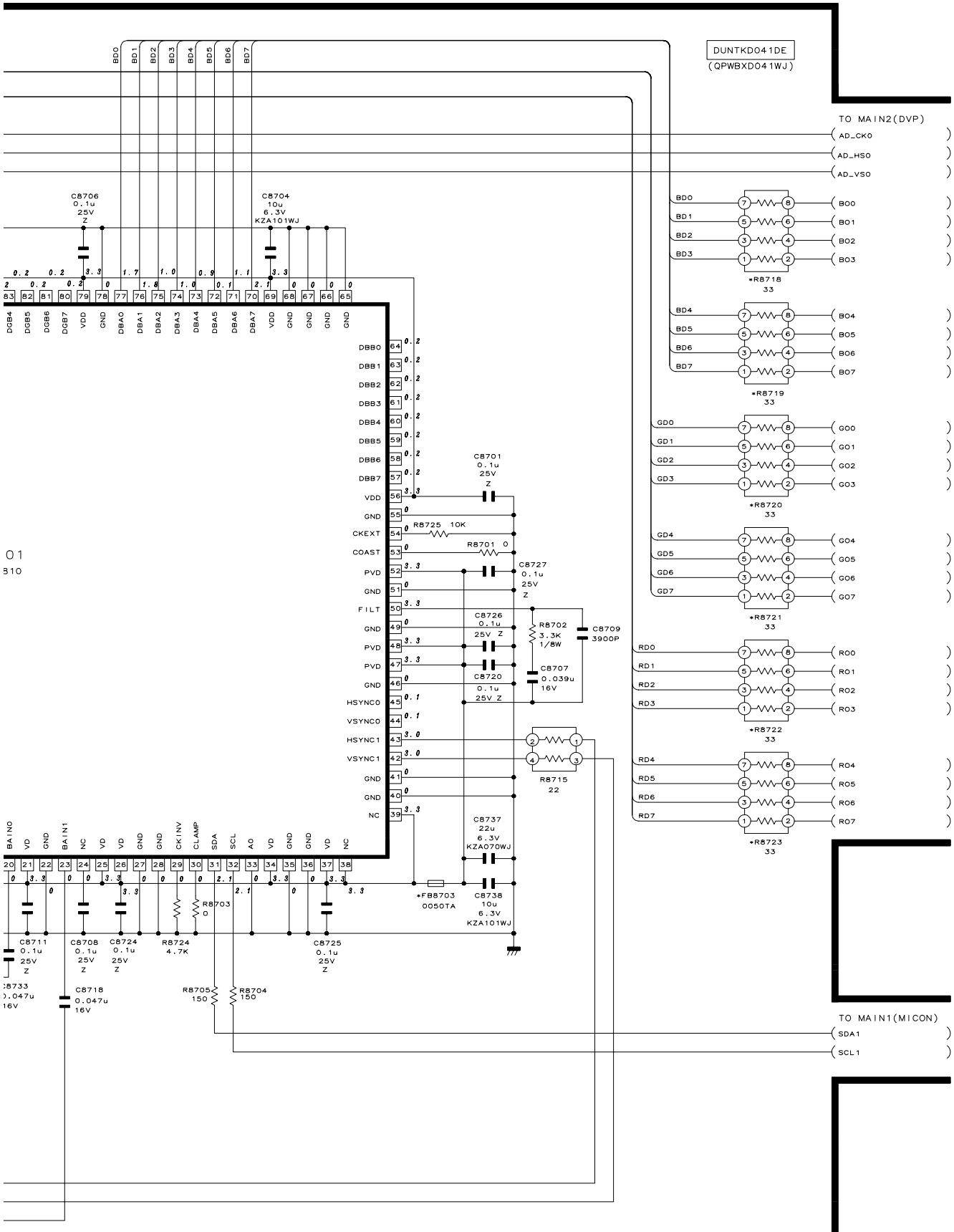



IC805
PQ20WZ11
DUNTKD041DE
(QPWBXD041WJ)
TO MAIN6(RSDS)
IC801
IXB170WJ
DVP
X801
54MHz
SCA097WJ

■MAIN Unit-3/7 (LC-20B9U-S)

MAIN3 (AD)

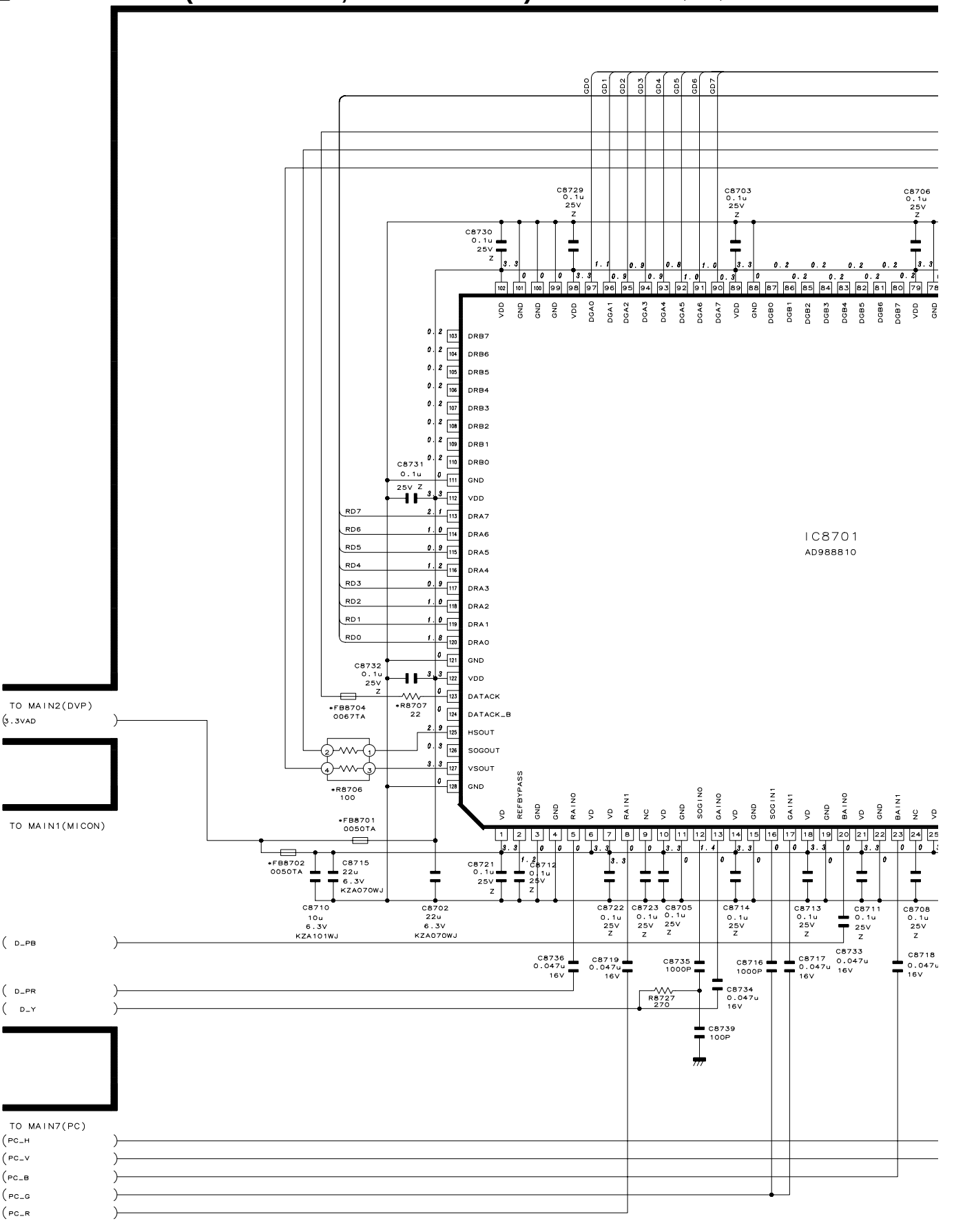


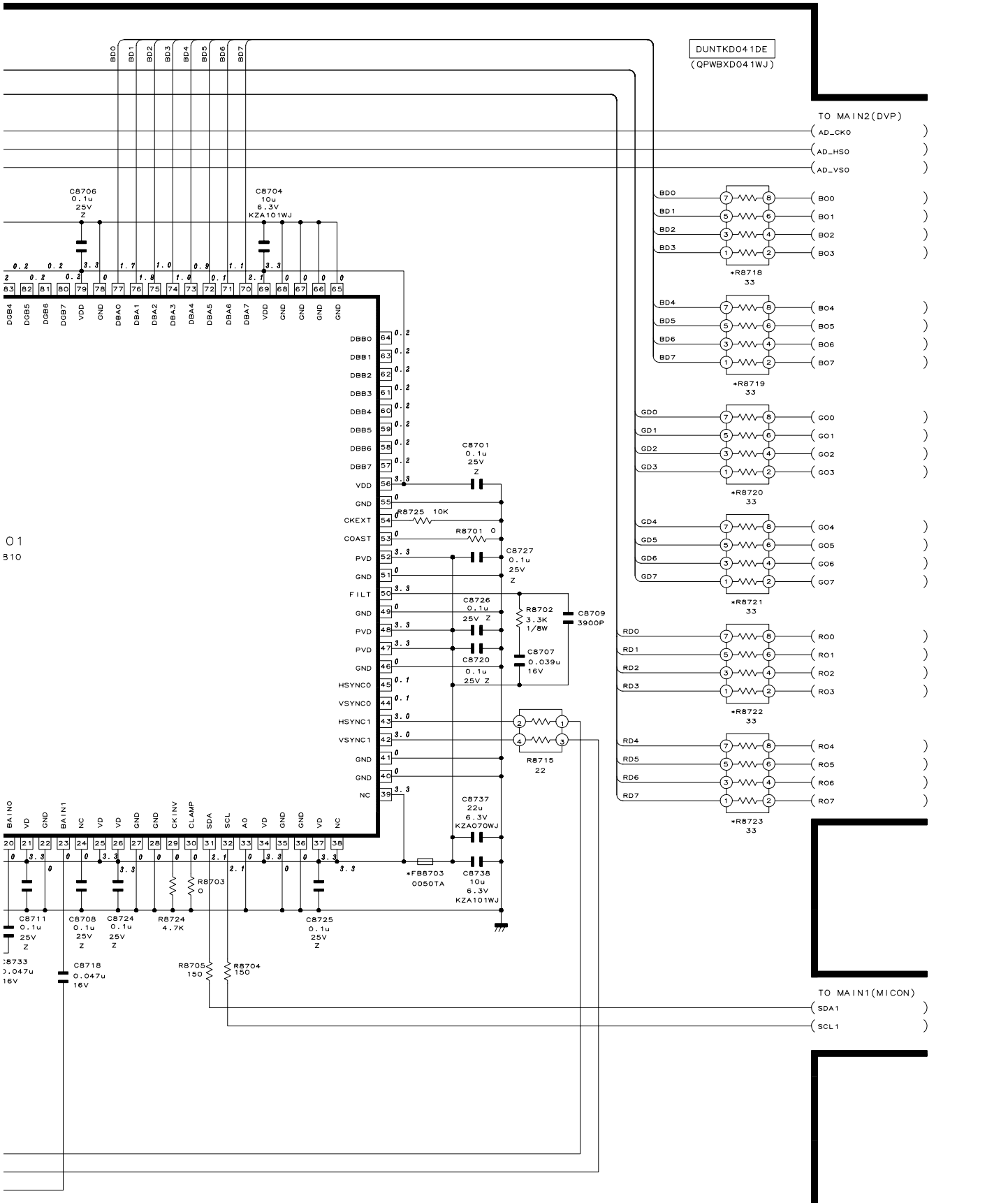


10	11	12	13	14	15	16	17	18	19

■MAIN Unit-3/7 (LC-20B8U-S, LC-20B9U-SM)

MAIN3 (AD)

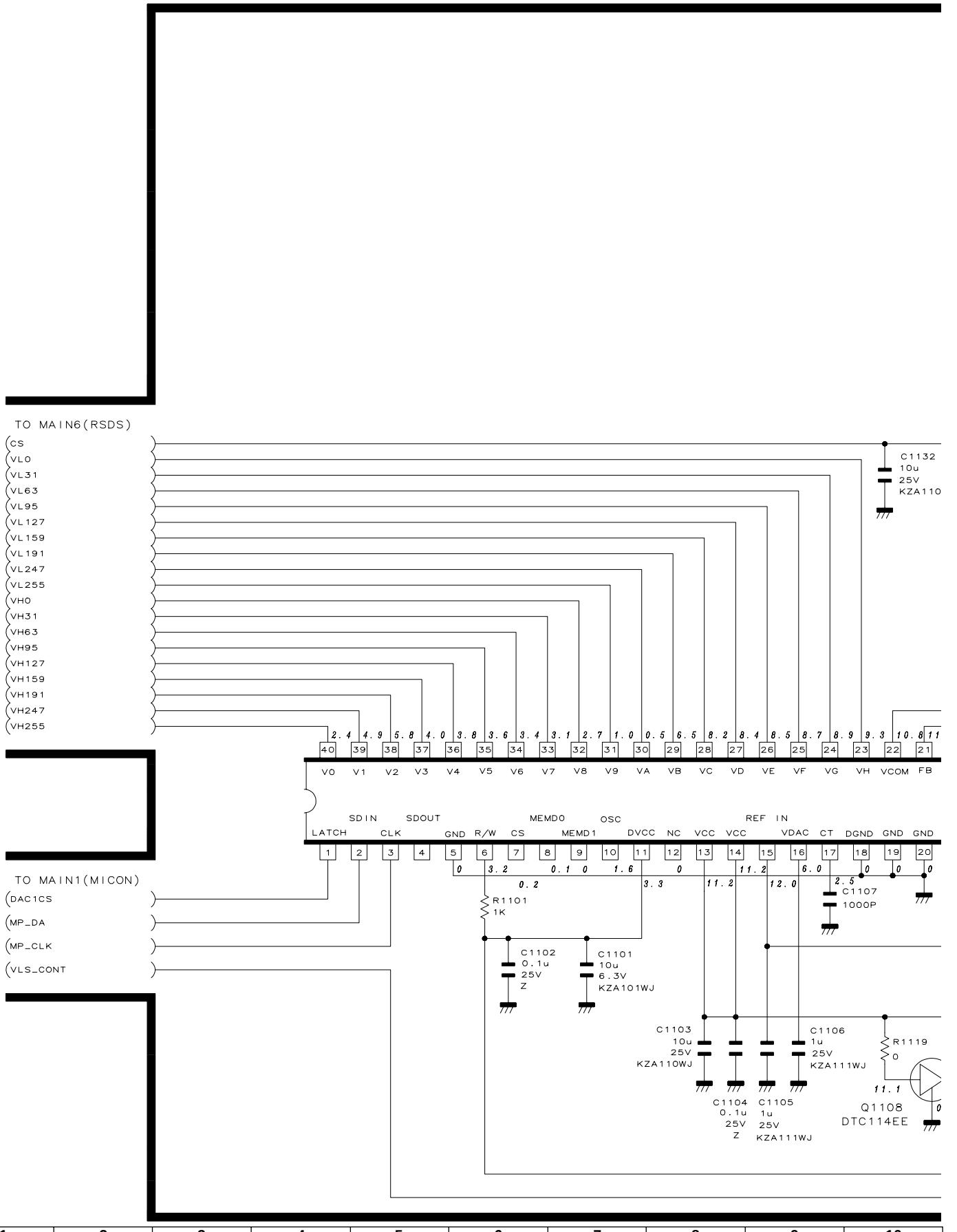


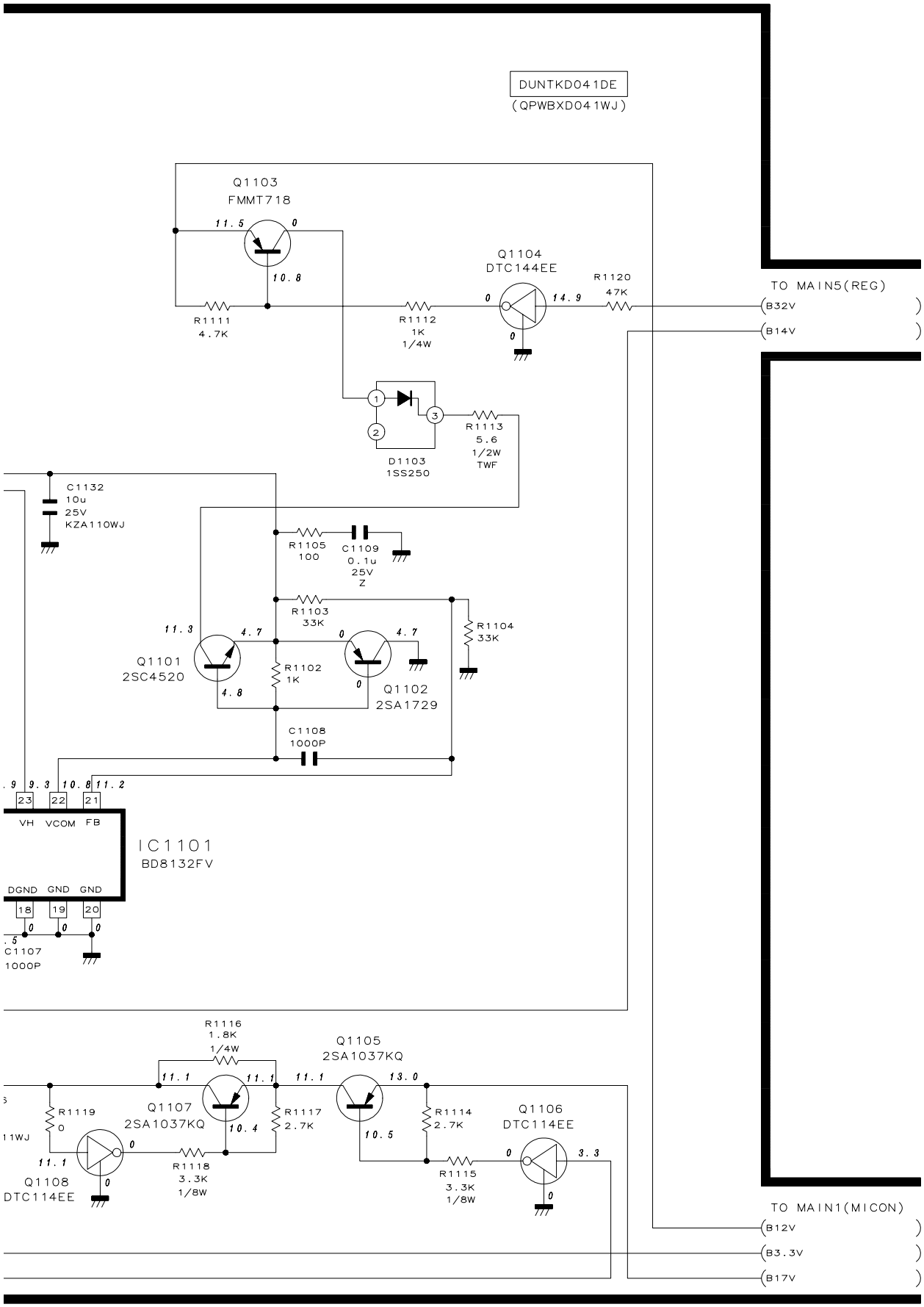


10	11	12	13	14	15	16	17	18	19

■MAIN Unit-4/7 (LC-20B9U-S)

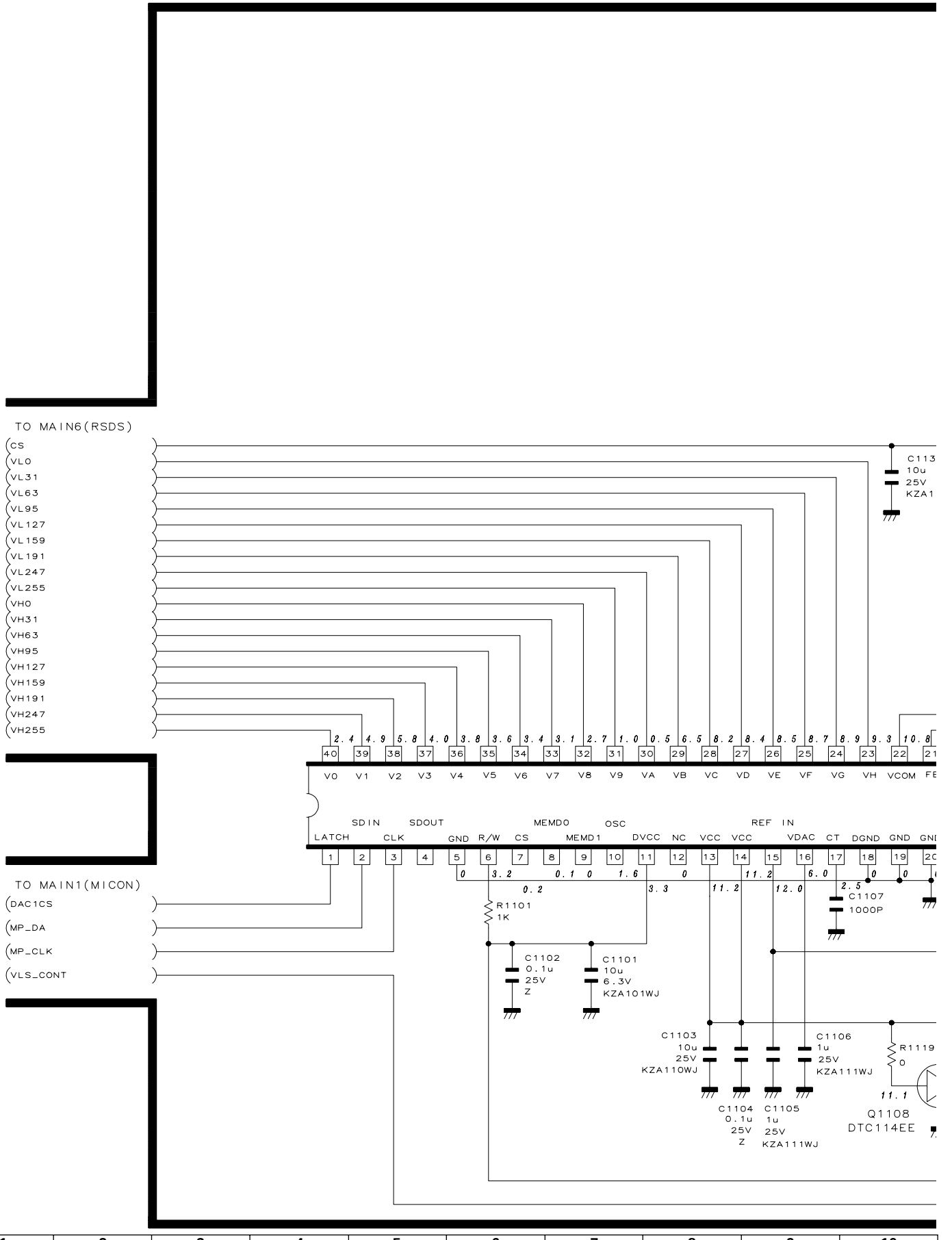
MAIN4 (DOT_GRAD)

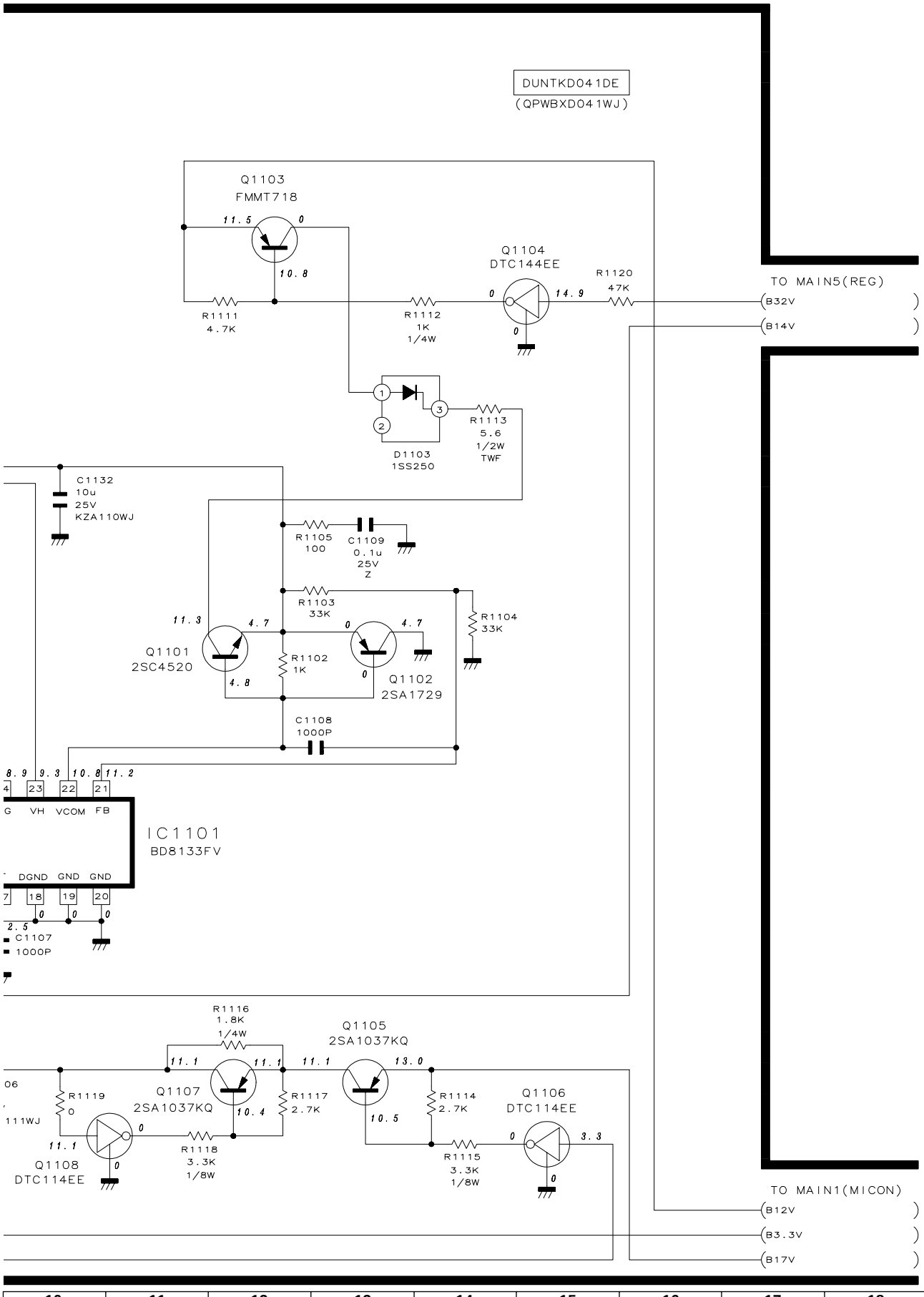




10	11	12	13	14	15	16	17	18	19

■MAIN Unit-4/7 (LC-20B8U-S, LC-20B9U-SM) MAIN4 (DOT_GRAD)

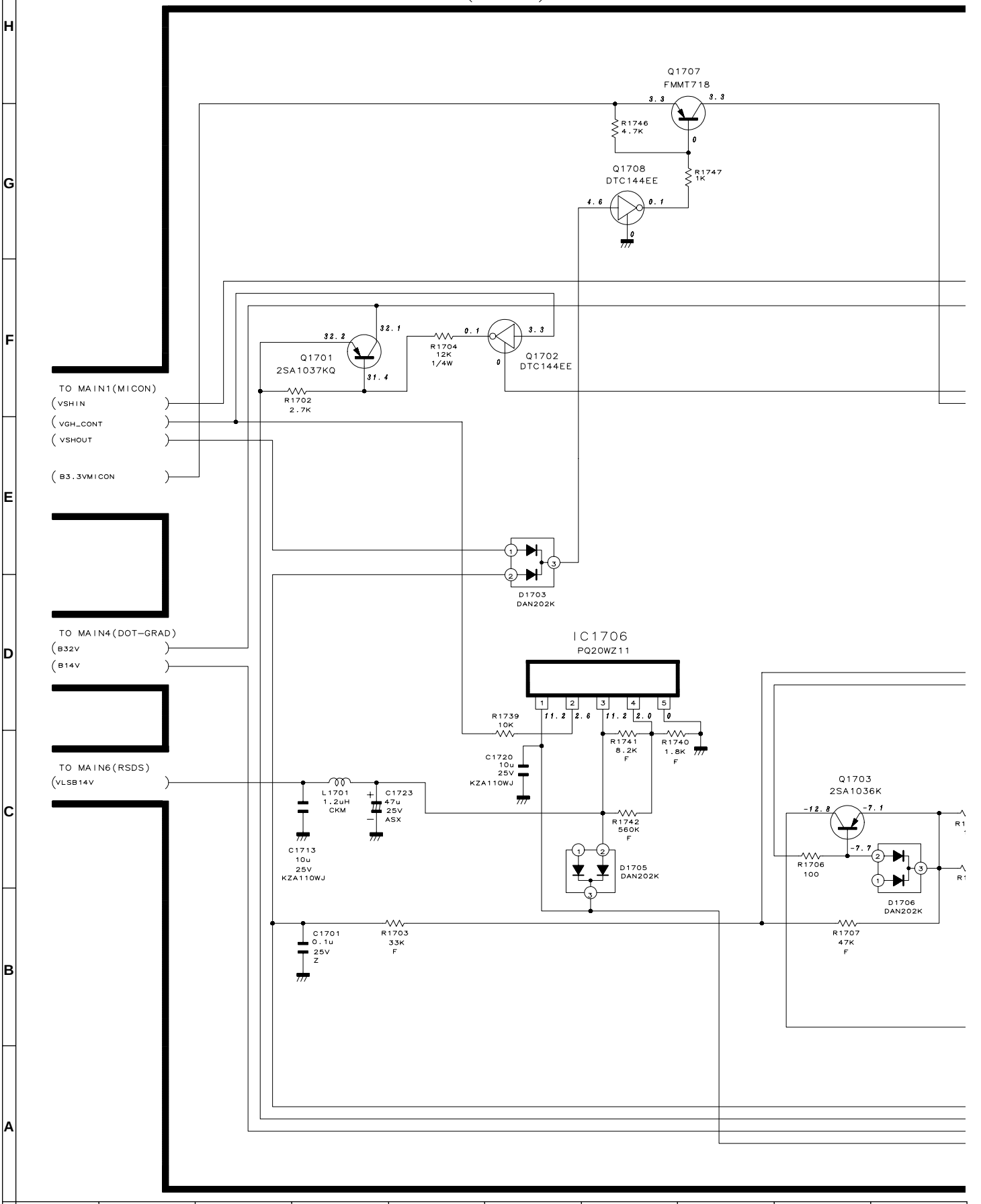


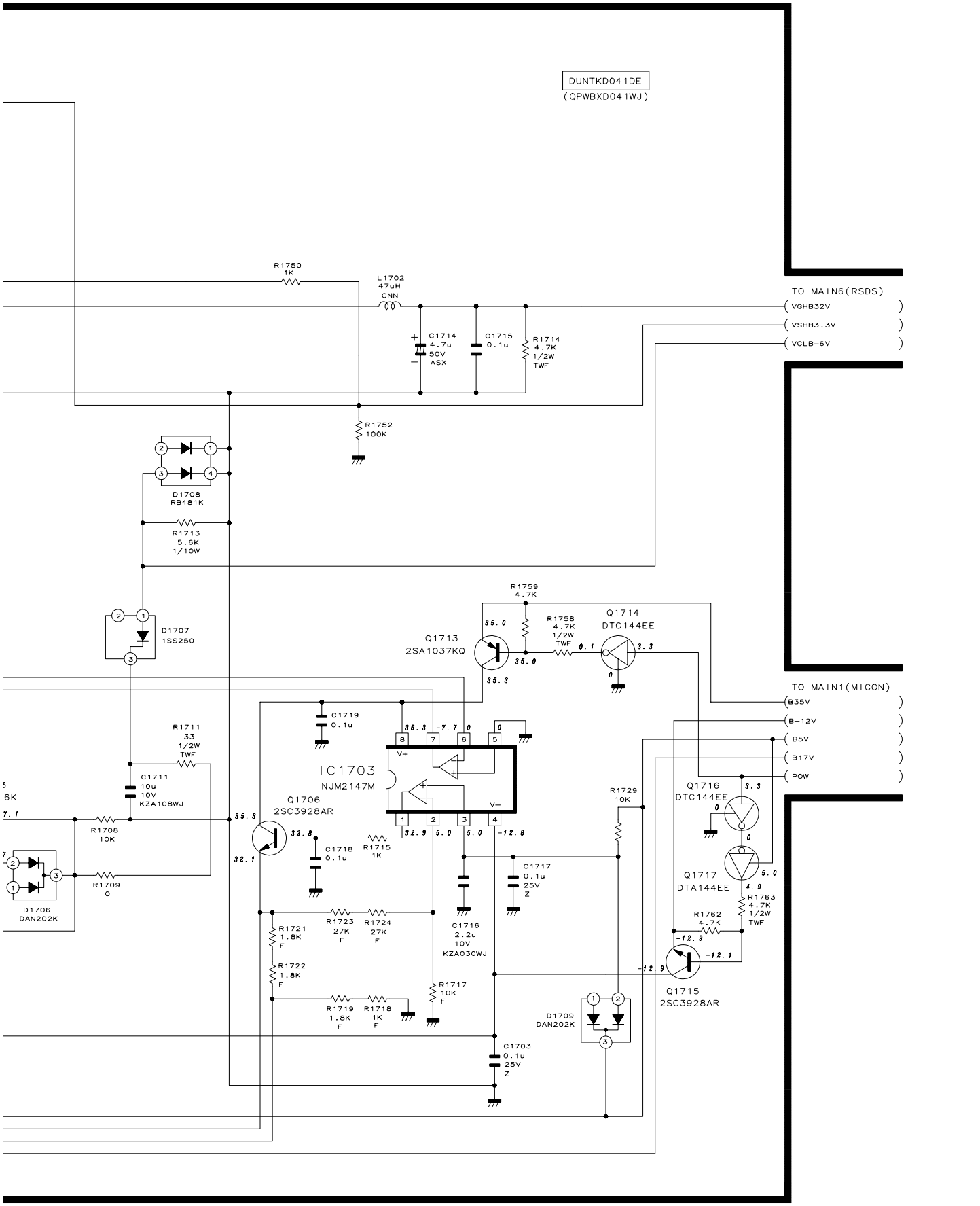


10	11	12	13	14	15	16	17	18	19

■MAIN Unit-5/7 (LC-20B9U-S)

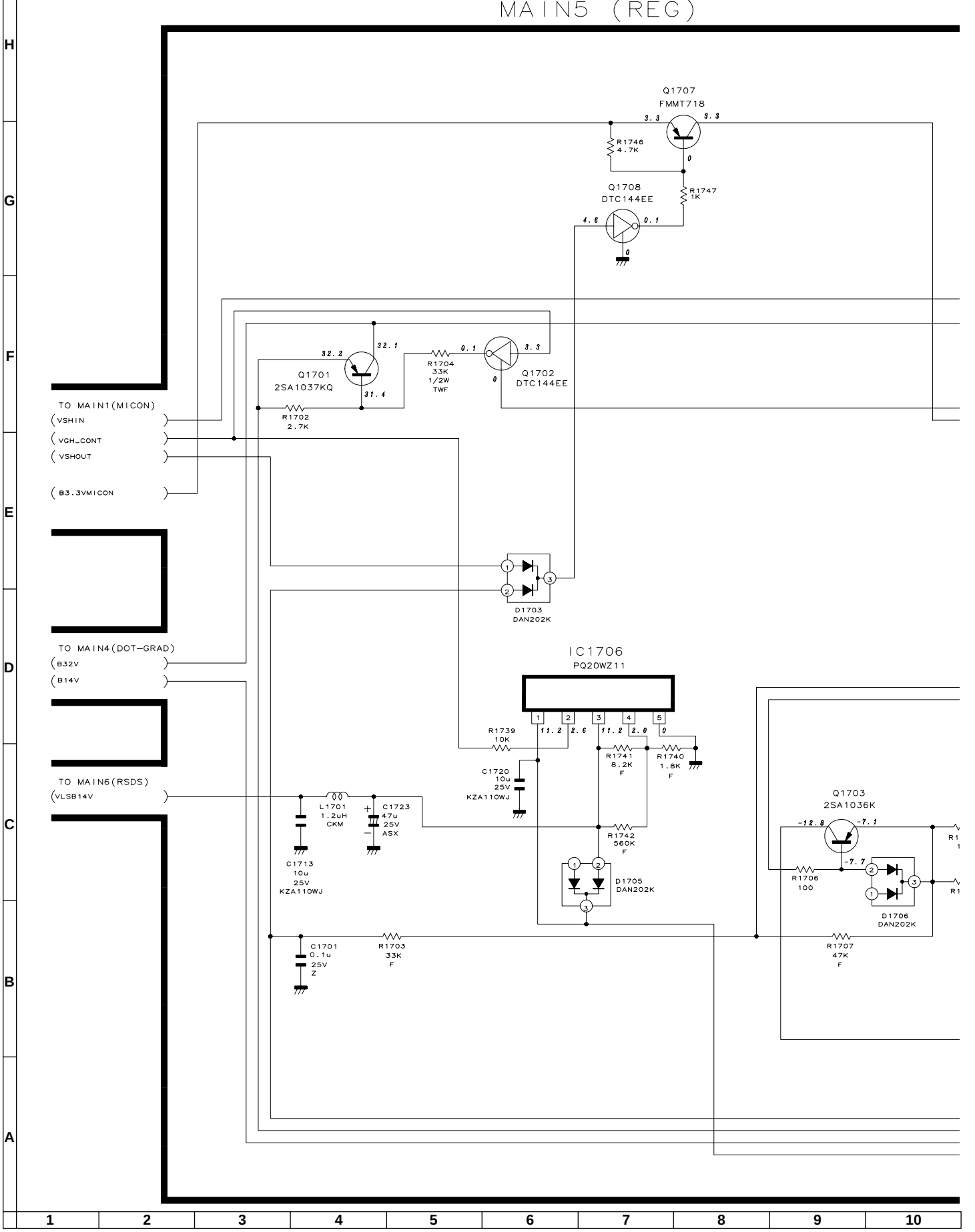
MAIN5 (REG)

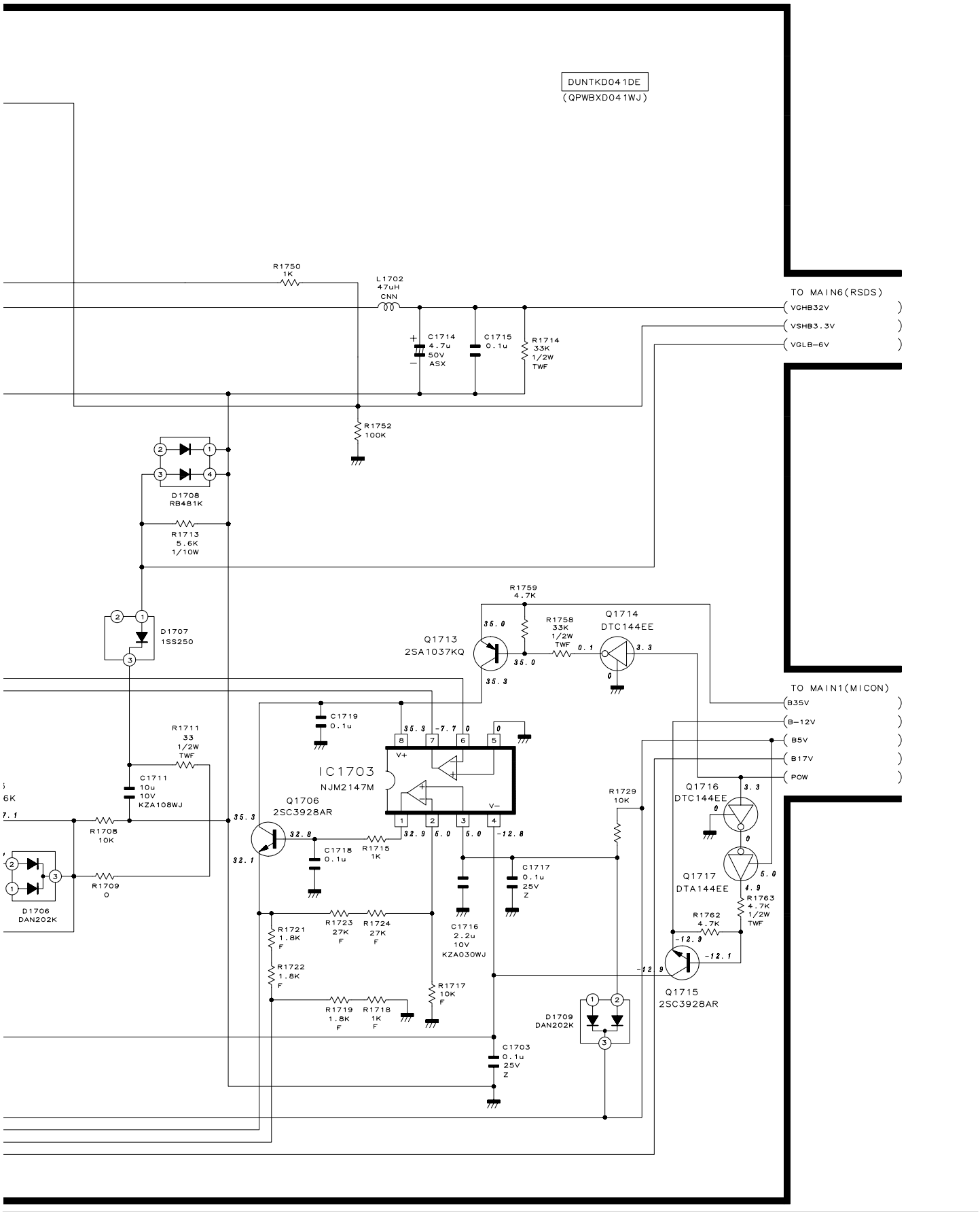




10	11	12	13	14	15	16	17	18	19

■MAIN Unit-5/7 (LC-20B8U-S, LC-20B9U-SM)

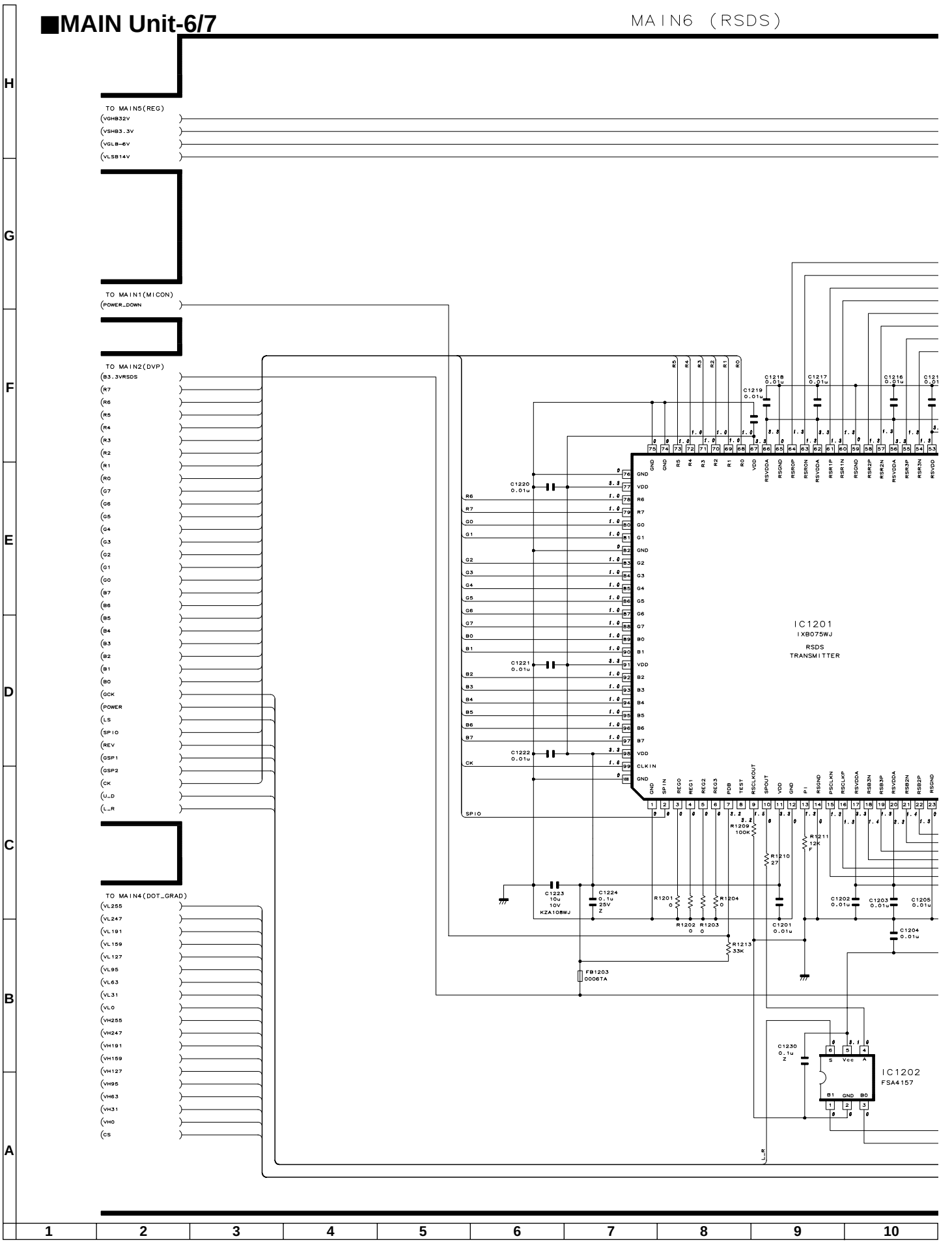


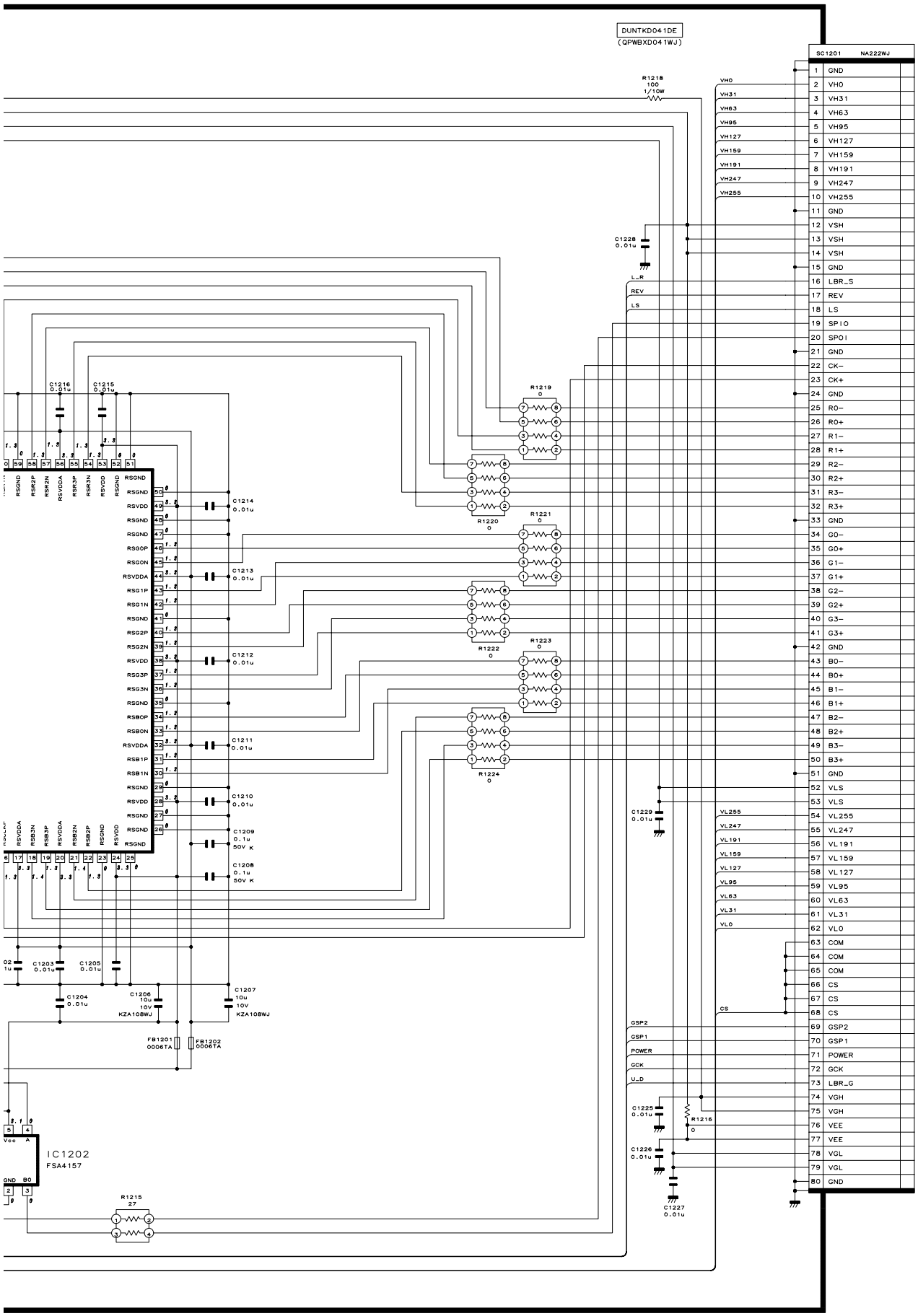


10	11	12	13	14	15	16	17	18	19

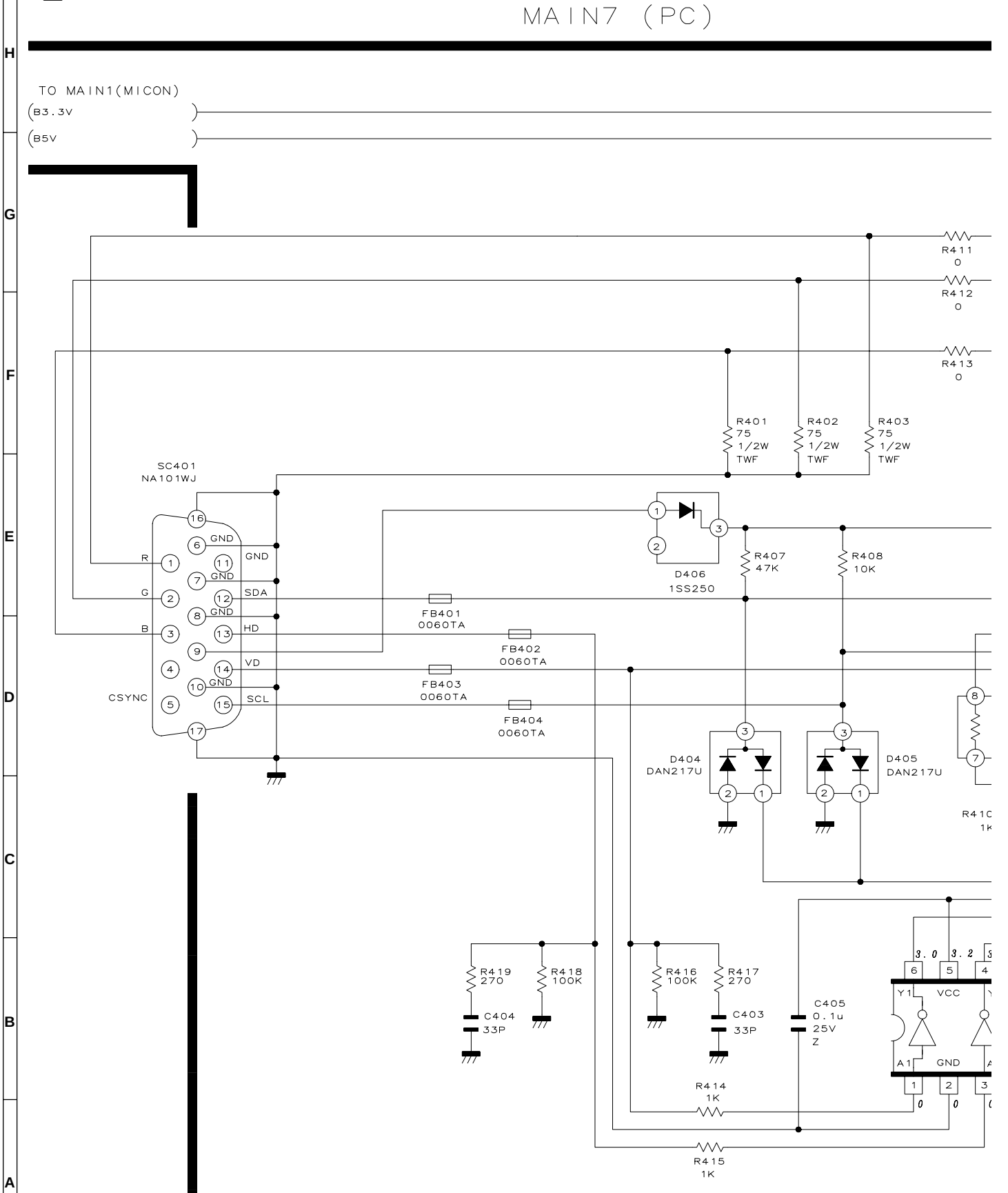
■MAIN Unit-6/7

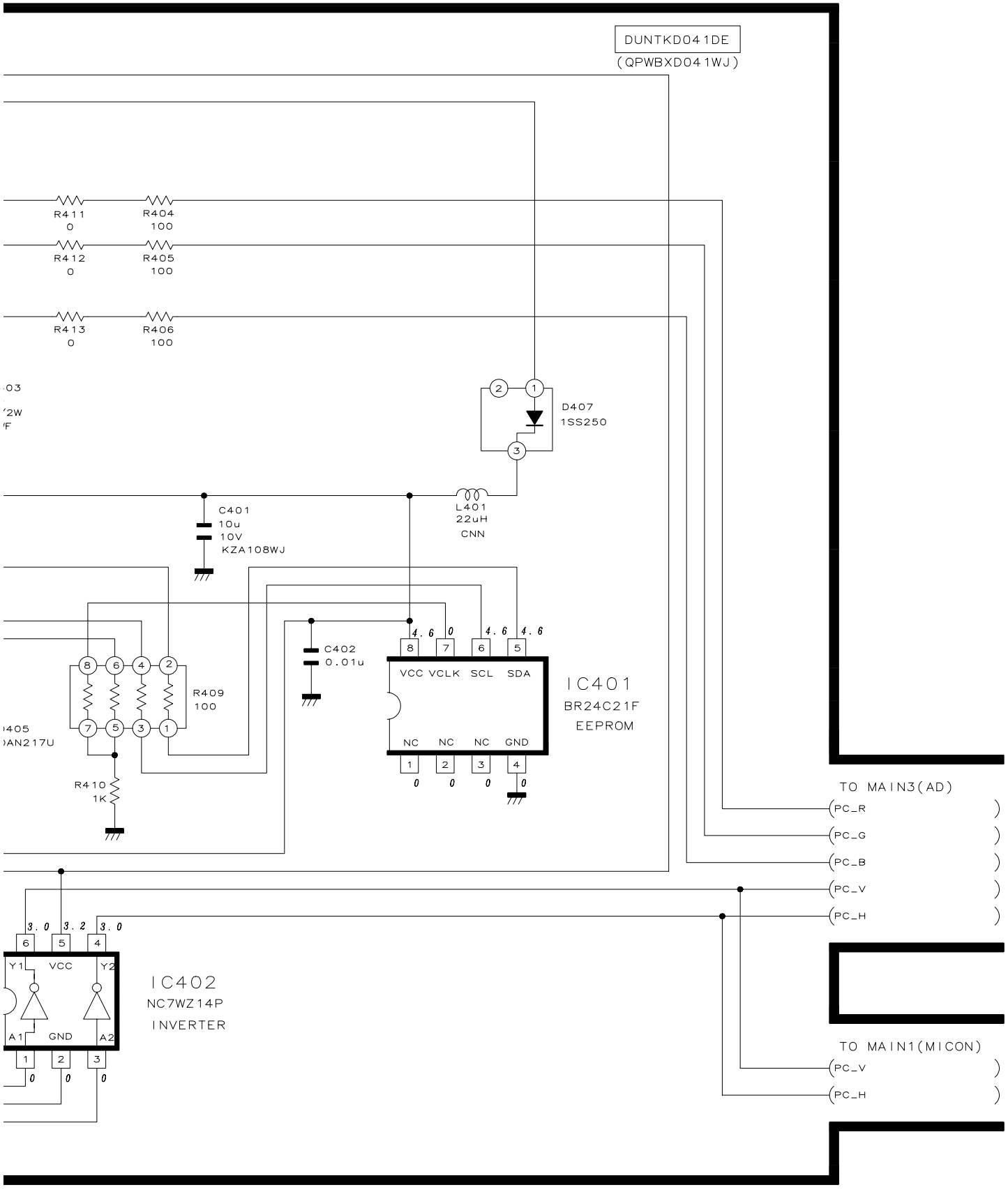
MAIN6 (RSDS)




DUNTKD041DE
(QPWBXD041WJ)
SC1201 NA222WJ
1 GND
2 VH0
3 VH31
4 VH63
5 VH95
6 VH127
7 VH159
8 VH191
9 VH247
10 VH255
11 GND
12 VSH
13 VSH
14 VSH
15 GND
16 LBR_S
17 REV
18 LS
19 SPIO
20 SPOI
21 GND
22 CK−
23 CK+
24 GND
25 R0−
26 R0+
27 R1−
28 R1+
29 R2−
30 R2+
31 R3−
32 R3+
33 GND
34 G0−
35 G0+
36 G1−
37 G1+
38 G2−
39 G2+
40 G3−
41 G3+
42 GND
43 B0−
44 B0+
45 B1−
46 B1+
47 B2−
48 B2+
49 B3−
50 B3+
51 GND
52 VLS
53 VLS
54 VL255
55 VL247
56 VL191
57 VL159
58 VL127
59 VL95
60 VL63
61 VL31
62 VL0
63 COM
64 COM
65 COM
66 CS
67 CS
68 CS
69 GSP2
70 GSP1
71 POWER
72 GCK
73 LBR_G
74 VGH
75 VGH
76 VEE
77 VEE
78 VGL
79 VGL
80 GND
R1218 100 1/10W
C1228 0.01u
C1229 0.01u
C1225 0.01u
C1226 0.01u
C1227 0.01u
R1216 0
L_R
REV
LS
GSP2
GSP1
POWER
GCK
U_D
CS
C1216 0.01u
C1215 0.01u
C1214 0.01u
C1213 0.01u
C1212 0.01u
C1211 0.01u
C1210 0.01u
C1209 0.1u 50V K
C1208 0.1u 50V K
C1203 0.01u
C1205 0.01u
C1204 0.01u
C1206 10u 10V KZA108WJ
C1207 10u 10V KZA108WJ
FB1201 0006TA
FB1202 0006TA
R1219 0
R1220 0
R1221 0
R1222 0
R1223 0
R1224 0
R1215 27
IC1202
FSA4157
RSGND
RSR2P
RSR2N
RSVDDA
RSR3P
RSR3N
RSVDD
RSGND
RSGND
RSGND
RSGND
RSGND
RSGOP
RSGON
RSVDDA
RSG1P
RSG1N
RSGND
RSG2P
RSG2N
RSVDD
RSG3P
RSG3N
RSGND
RSBOP
RSBON
RSVDDA
RSB1P
RSB1N
RSGND
RSVDD
RSGND
RSGND
RSVDDA
RSB3N
RSB3P
RSVDDA
RSB2N
RSB2P
RSGND
RSVDD

■MAIN Unit-7/7

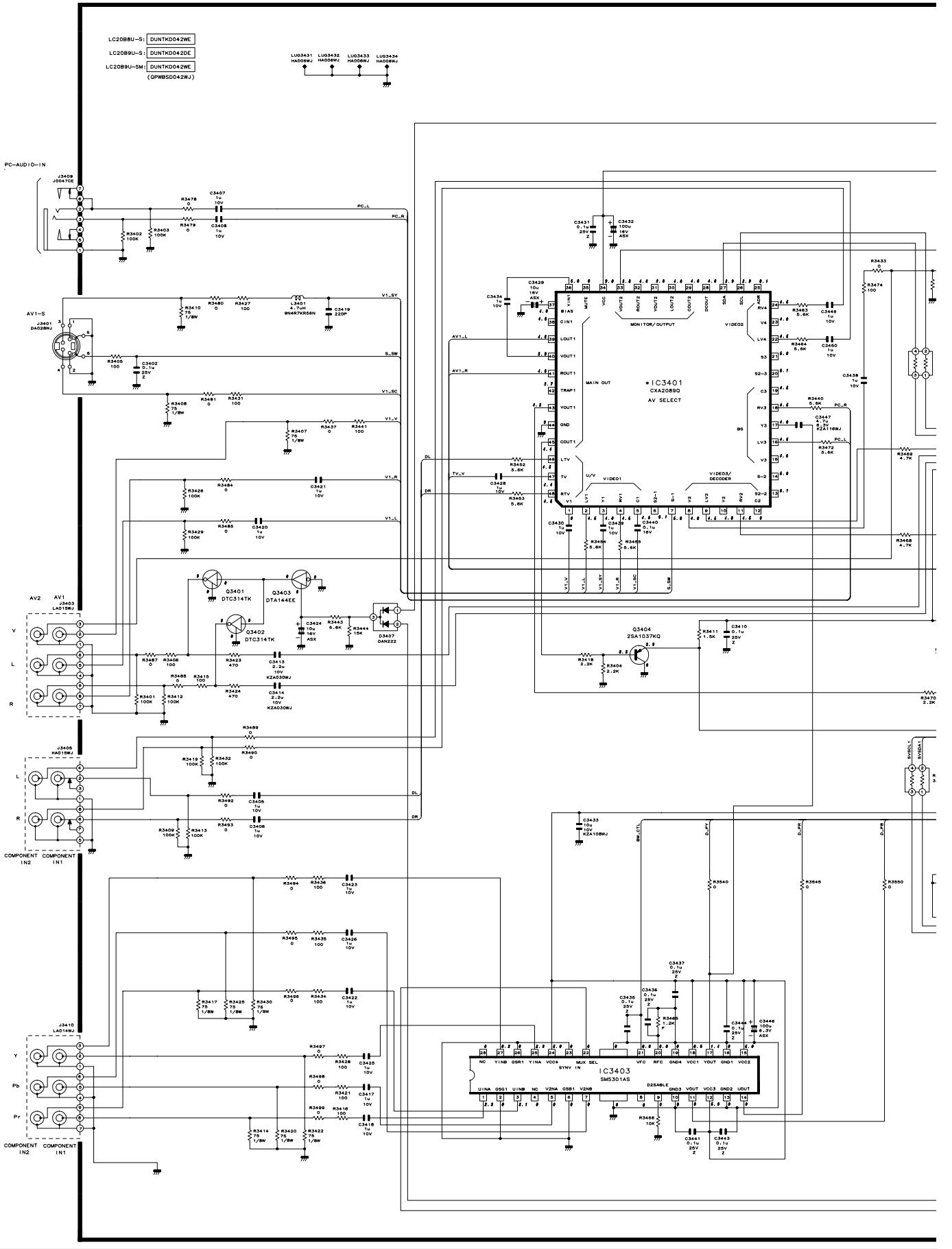

MAIN7 (PC)
TO MAIN1(MICON)
B3.3V
B5V
R411 0
R412 0
R413 0
R401 75 1/2W TWF
R402 75 1/2W TWF
R403 75 1/2W TWF
SC401 NA101WJ
GND
SDA
HD
VD
SCL
CSYNC
D406 1SS250
R407 47K
R408 10K
FB401 0060TA
FB402 0060TA
FB403 0060TA
FB404 0060TA
D404 DAN217U
D405 DAN217U
R419 270
R418 100K
C404 33P
R416 100K
R417 270
C403 33P
C405 0.1u 25V Z
R414 1K
R415 1K
VCC
GND

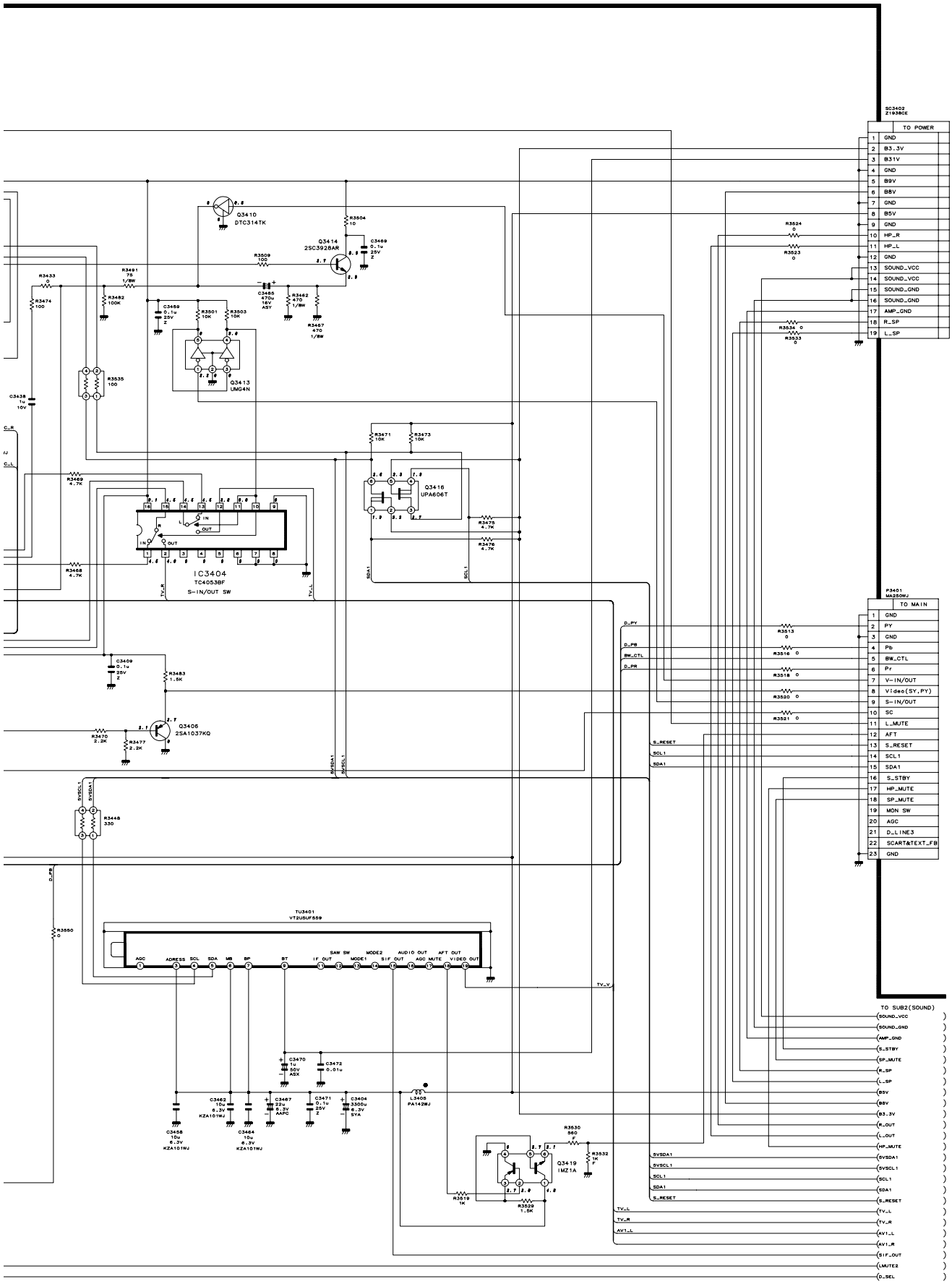


10	11	12	13	14	15	16	17	18	19

■SUB Unit-1/2

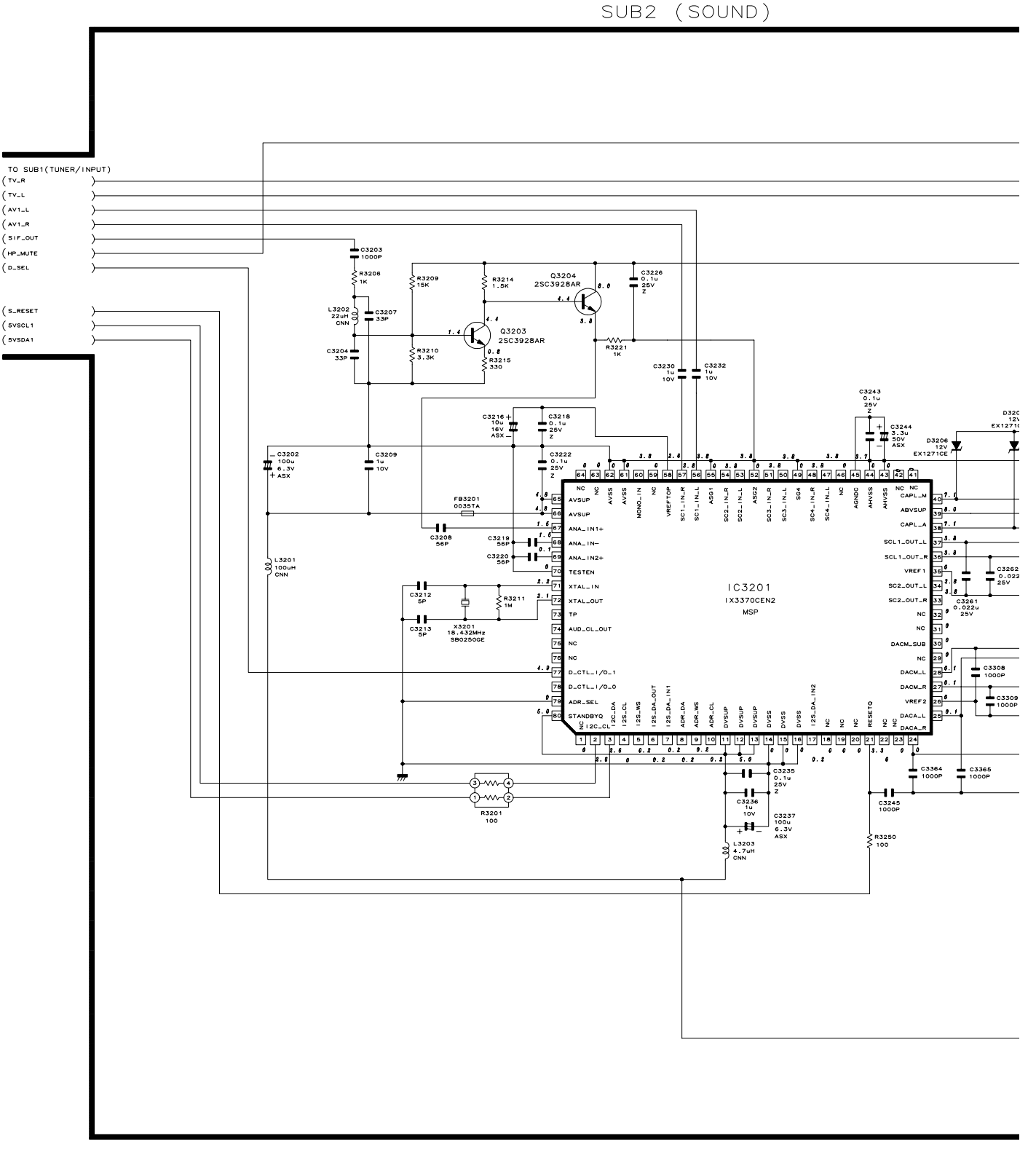
SUB1 (TUNER/INPUT)

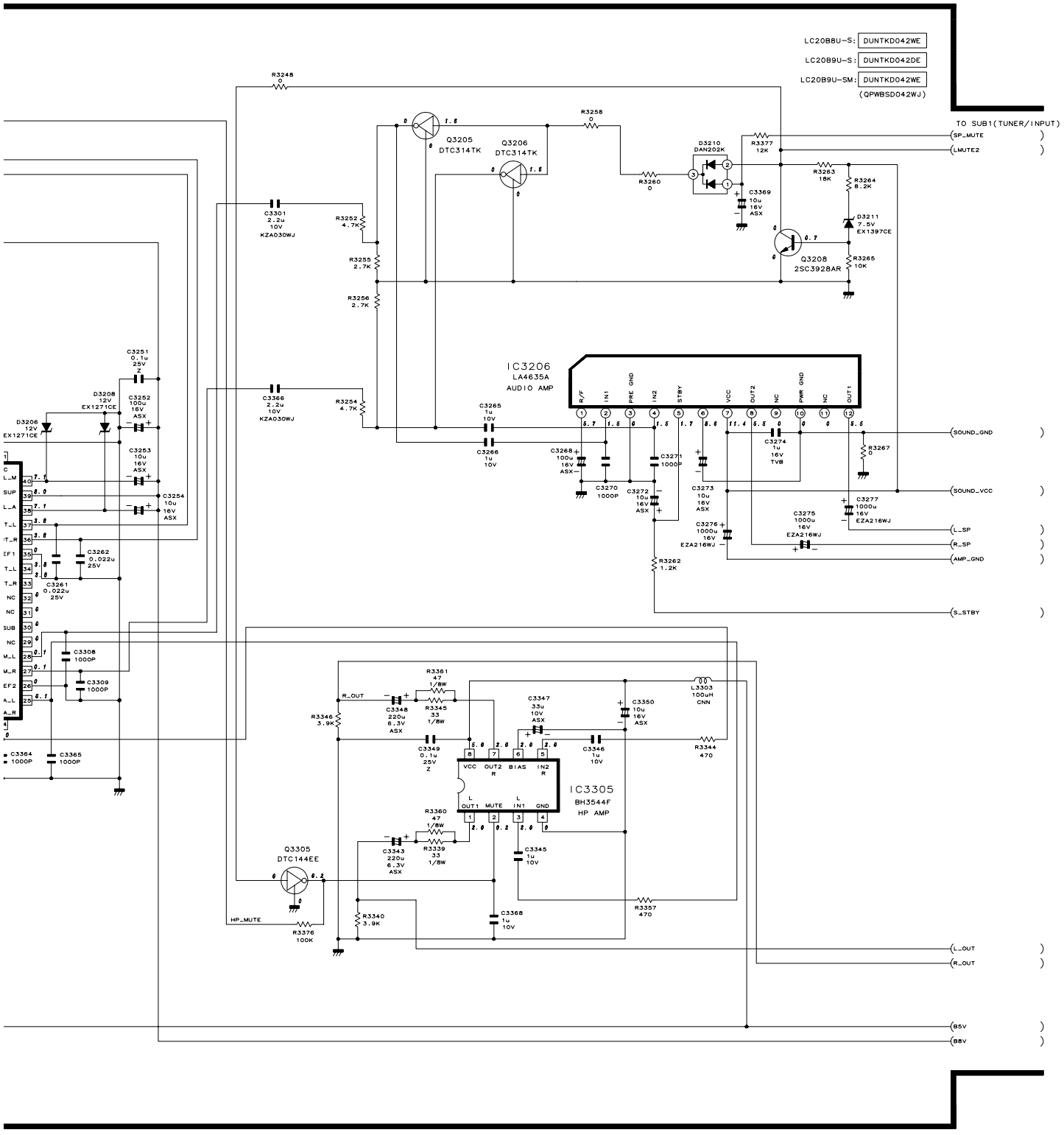




10	11	12	13	14	15	16	17	18	19

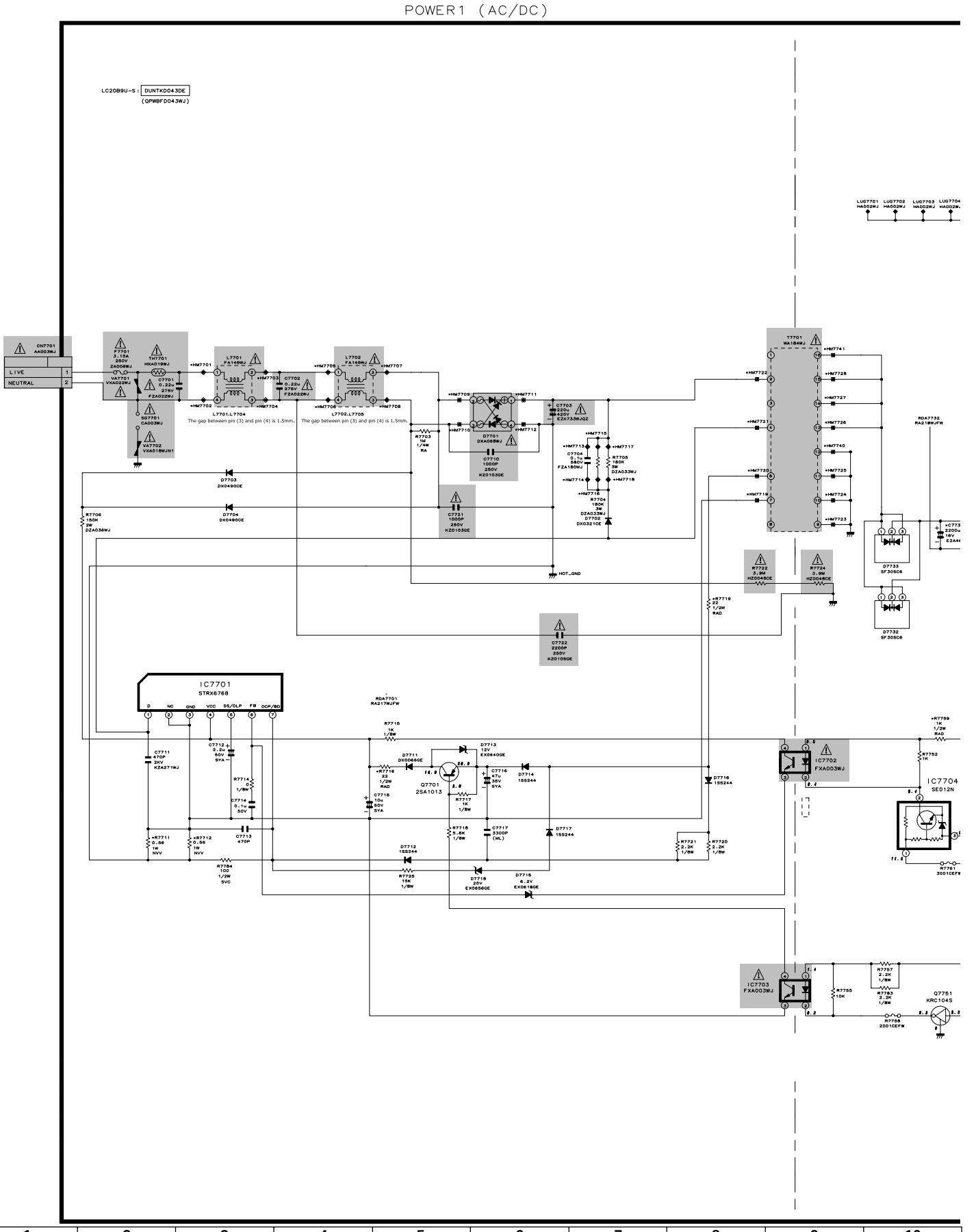
■SUB Unit-2/2

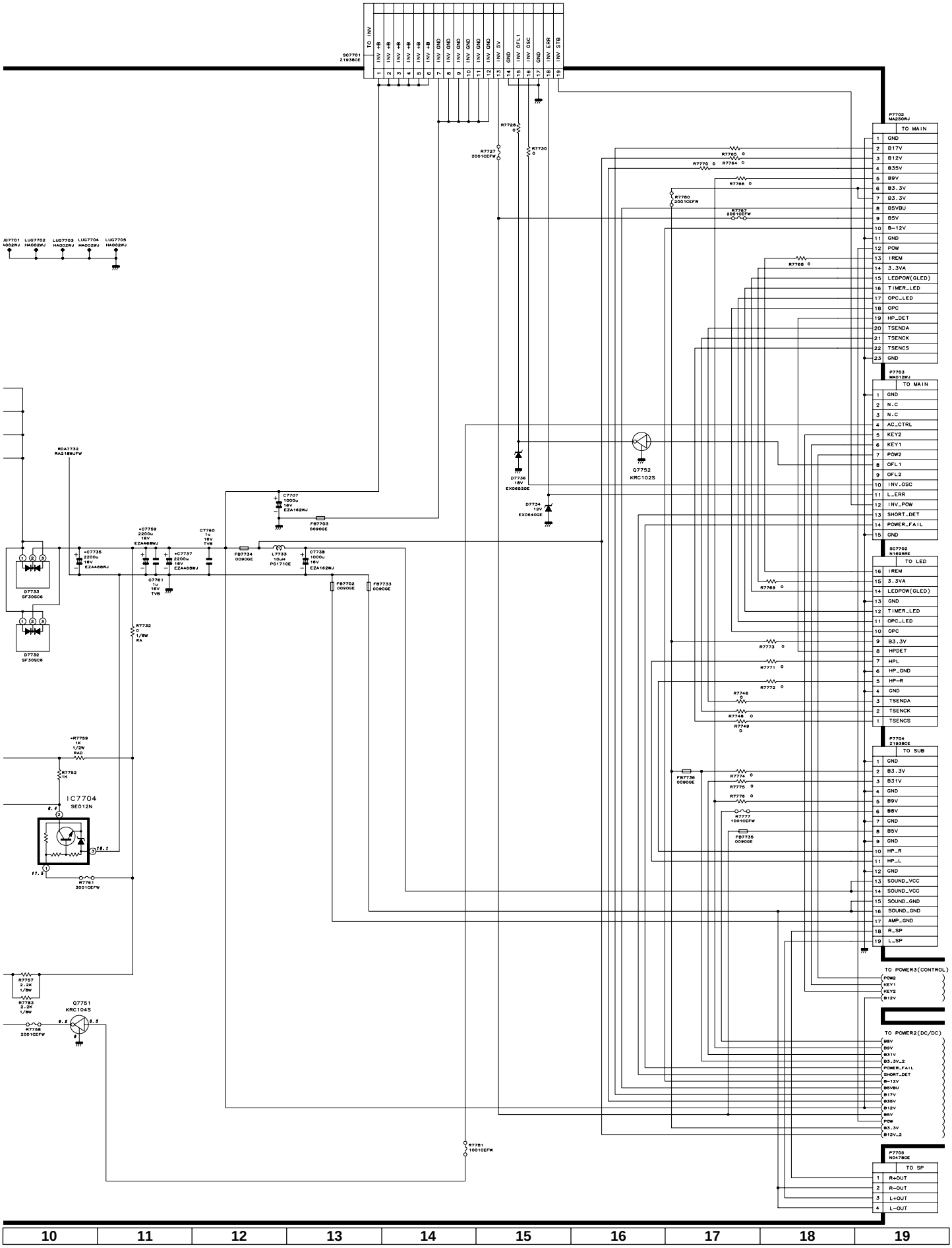

SUB2 (SOUND)
TO SUB1(TUNER/INPUT)
TV_R
TV_L
AV1_L
AV1_R
SIF_OUT
HP_MUTE
D_SEL
S_RESET
5VSCL1
5VSDA1
IC3201
IX3370CEN2
MSP
Q3204
2SC3928AR
Q3203
2SC3928AR
X3201
18.432MHz
SB02500GE



10	11	12	13	14	15	16	17	18	19

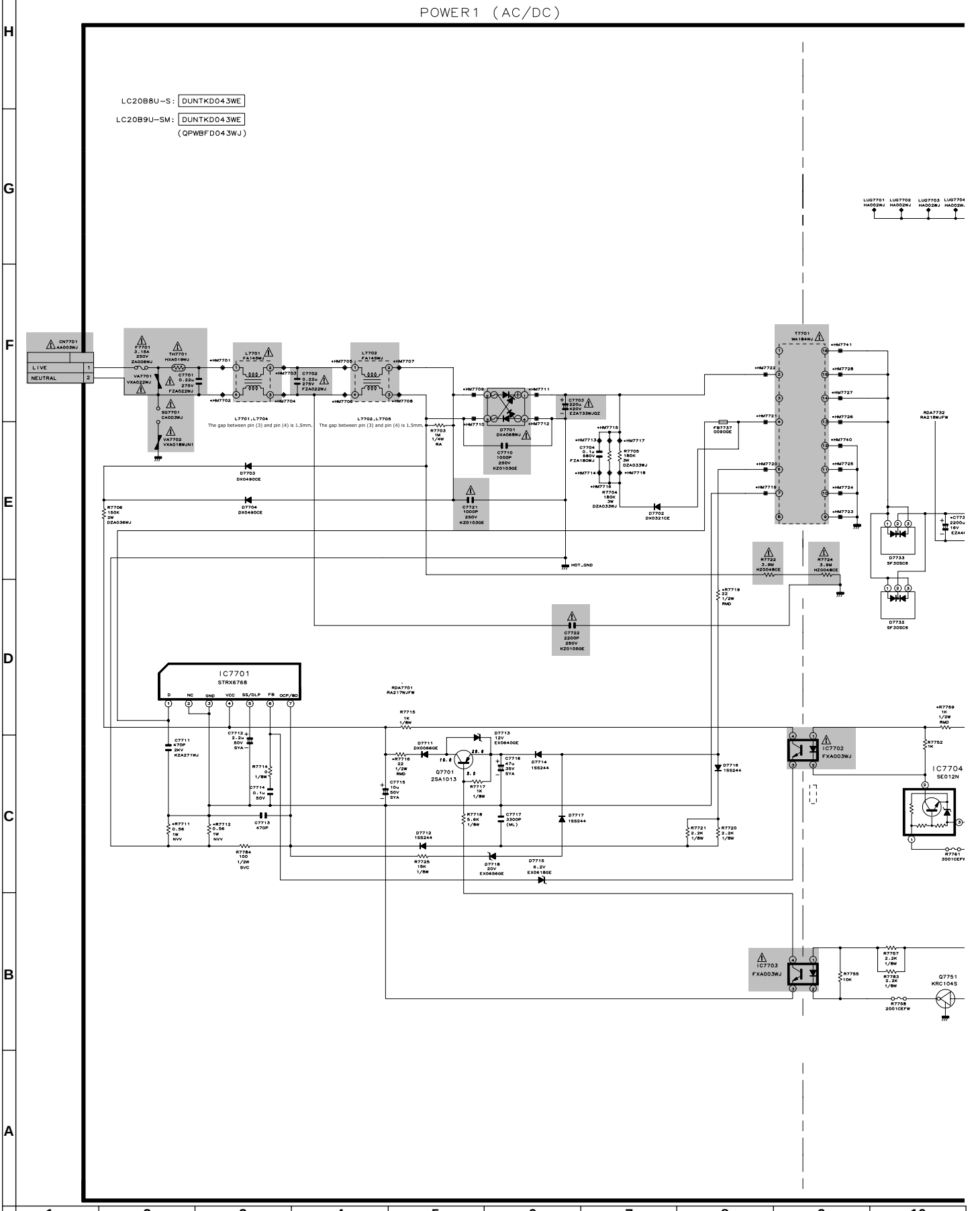
■POWER Unit-1/3 (LC-20B9U-S)

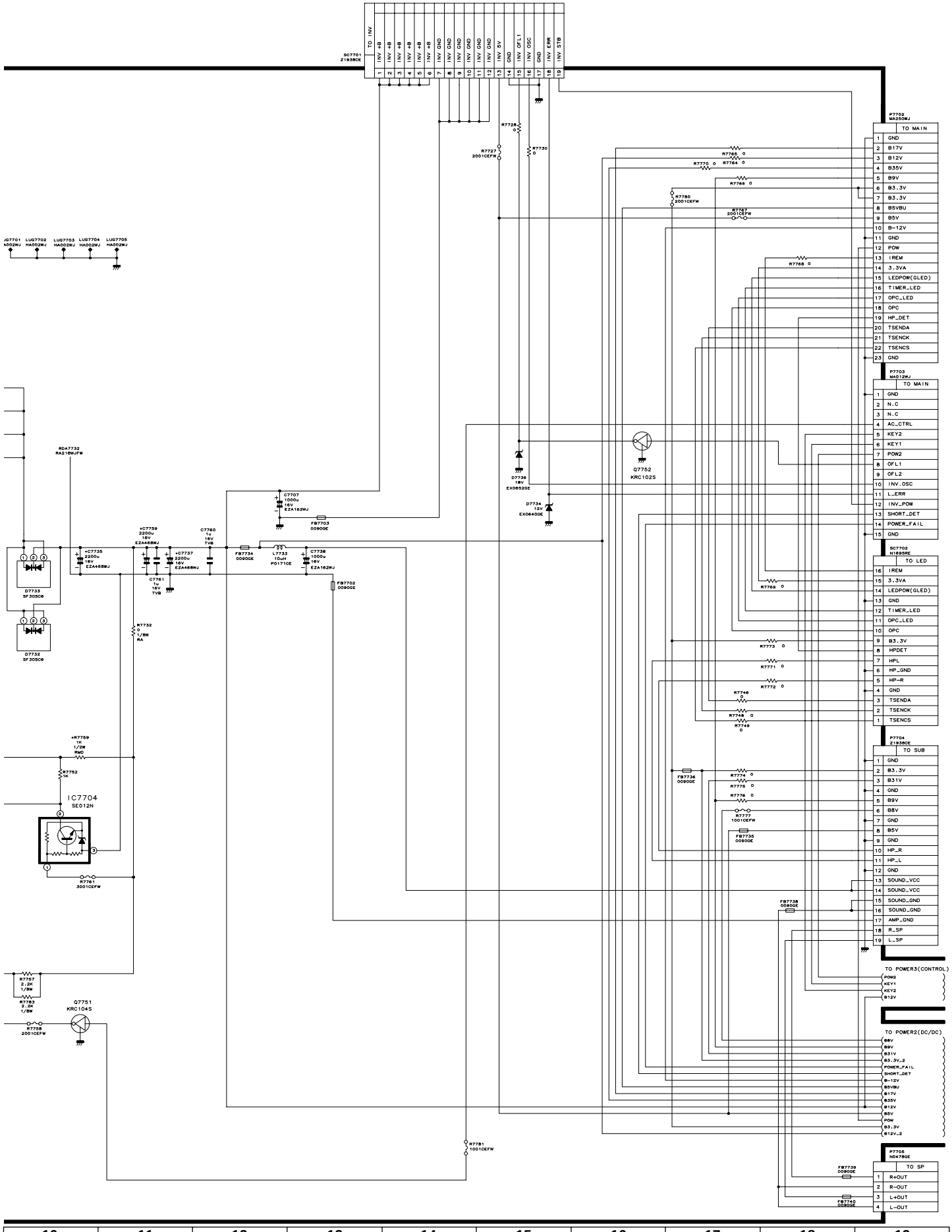




10	11	12	13	14	15	16	17	18	19

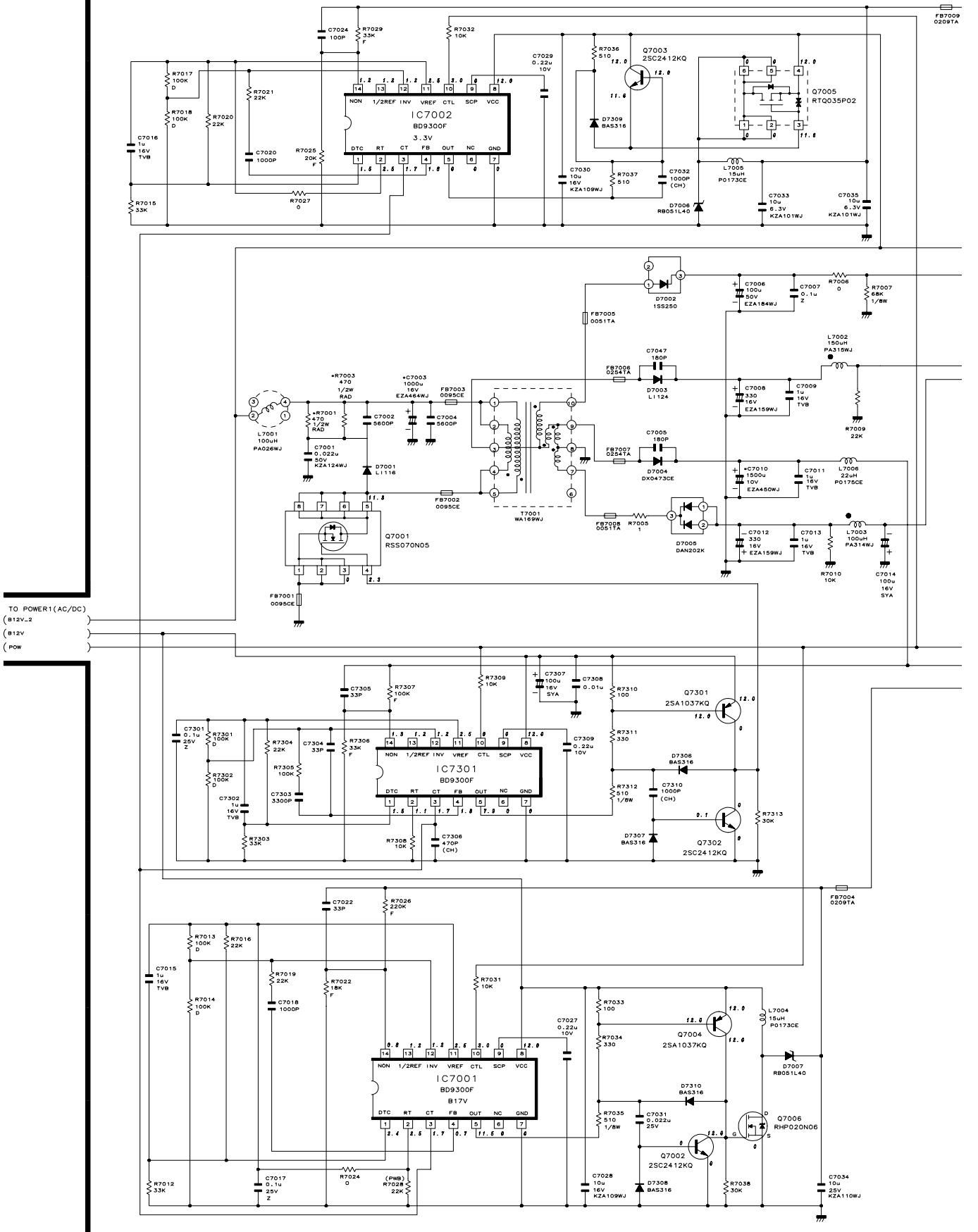
■POWER Unit-1/3 (LC-20B8U-S, LC-20B9U-SM)

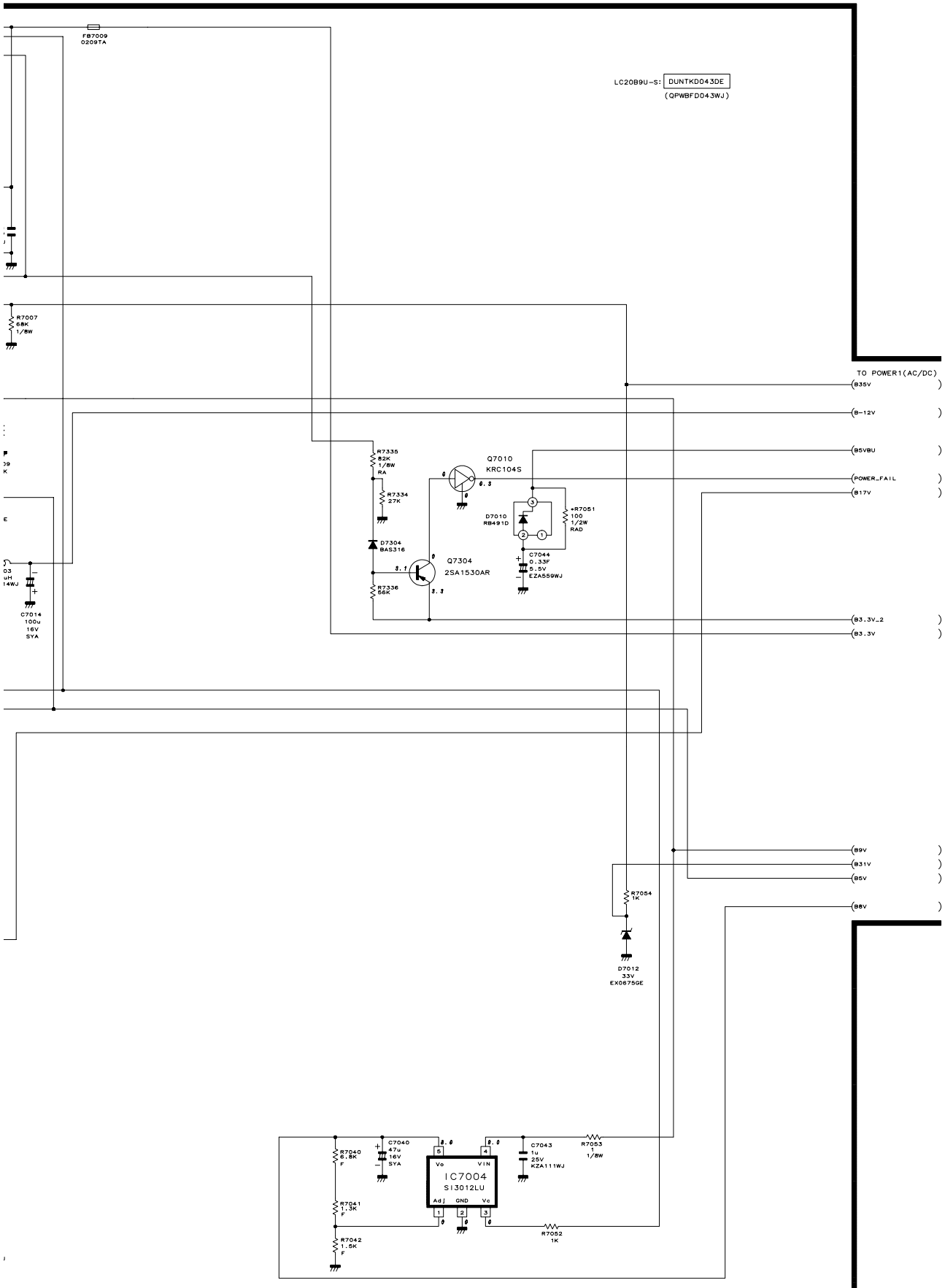



SC7701 Z1938CE
TO INV
INV +B
INV 5V
GND
INV OFL1
INV OSC
INV ERR
INV STB
R7728
R7727 2001CEFW
R7730 0
R7702 MA350WJ
TO MAIN
GND
B17V
B12V
B35V
B9V
B3.3V
B3.3V
B5VBU
B5V
B-12V
GND
POW
IREM
3.3VA
LEDPOW(GLED)
TIMER_LED
OPC_LED
OPC
HP_DET
TSENDA
TSENCK
TSENCS
GND
R7765 0
R7764 0
R7770 0
R7766 0
R7780 2001CEFW
R7767 2001CEFW
R7768 0
P7703 MA012WJ
TO MAIN
GND
N.C
N.C
AC_CTRL
KEY2
KEY1
POW2
OFL1
OFL2
INV.OSC
L_ERR
INV_POW
SHORT_DET
POWER_FAIL
GND
Q7752 KRC102S
D7736 18V EX08520E
D7734 12V EX06400E
SC7702 N1895RE
TO LED
IREM
3.3VA
LEDPOW(GLED)
GND
TIMER_LED
OPC_LED
OPC
B3.3V
HPDET
HPL
HP_GND
HP-R
GND
TSENDA
TSENCK
TSENCS
R7769 0
R7773 0
R7771 0
R7772 0
R7746
R7748 0
R7749 0
P7704 Z1938CE
TO SUB
GND
B3.3V
B31V
GND
B9V
B8V
GND
B5V
GND
HP_R
HP_L
GND
SOUND_VCC
SOUND_VCC
SOUND_GND
SOUND_GND
AMP_GND
R_SP
L_SP
FB7736 0090GE
R7774 0
R7775 0
R7776 0
R7777 1001CEFW
FB7735 0090GE
FB7738 0090GE
TO POWER3(CONTROL)
POW2
KEY1
KEY2
B12V
TO POWER2(DC/DC)
B8V
B9V
B31V
B3.3V_2
POWER_FAIL
SHORT_DET
B-12V
B5VBU
B17V
B35V
B12V
B5V
POW
B3.3V
B12V_2
P7705 N0478GE
TO SP
R+OUT
R-OUT
L+OUT
L-OUT
FB7739 0090GE
FB7740 0090GE
JG7701 6002WJ
LUG7702 HA002WJ
LUG7703 HA002WJ
LUG7704 HA002WJ
LUG7705 HA002WJ
RDA7732 RA218WJFW
D7733 SF305C6
D7732 SF305C6
R7732 0 1/8W #A
+C7735 2200u 16V EZA468WJ
+C7759 2200u 16V EZA468WJ
+C7737 2200u 16V EZA468WJ
C7760 1u 16V TVB
C7761 1u 16V TVB
FB7734 0090GE
L7733 10uH P0171CE
C7738 1000u 16V EZA162WJ
C7707 1000u 16V EZA162WJ
FB7703 0090GE
FB7702 0090GE
+R7759 1K 1/2W RMD
R7752 1K
IC7704 SE012N
R7761 3001CEFW
R7757 2.2K 1/8W
R7783 2.2K 1/8W
R7758 2001CEFW
Q7751 KRC104S
R7781 1001CEFW

■POWER Unit-2/3 (LC-20B9U-S)

POWER2 (DC/DC)

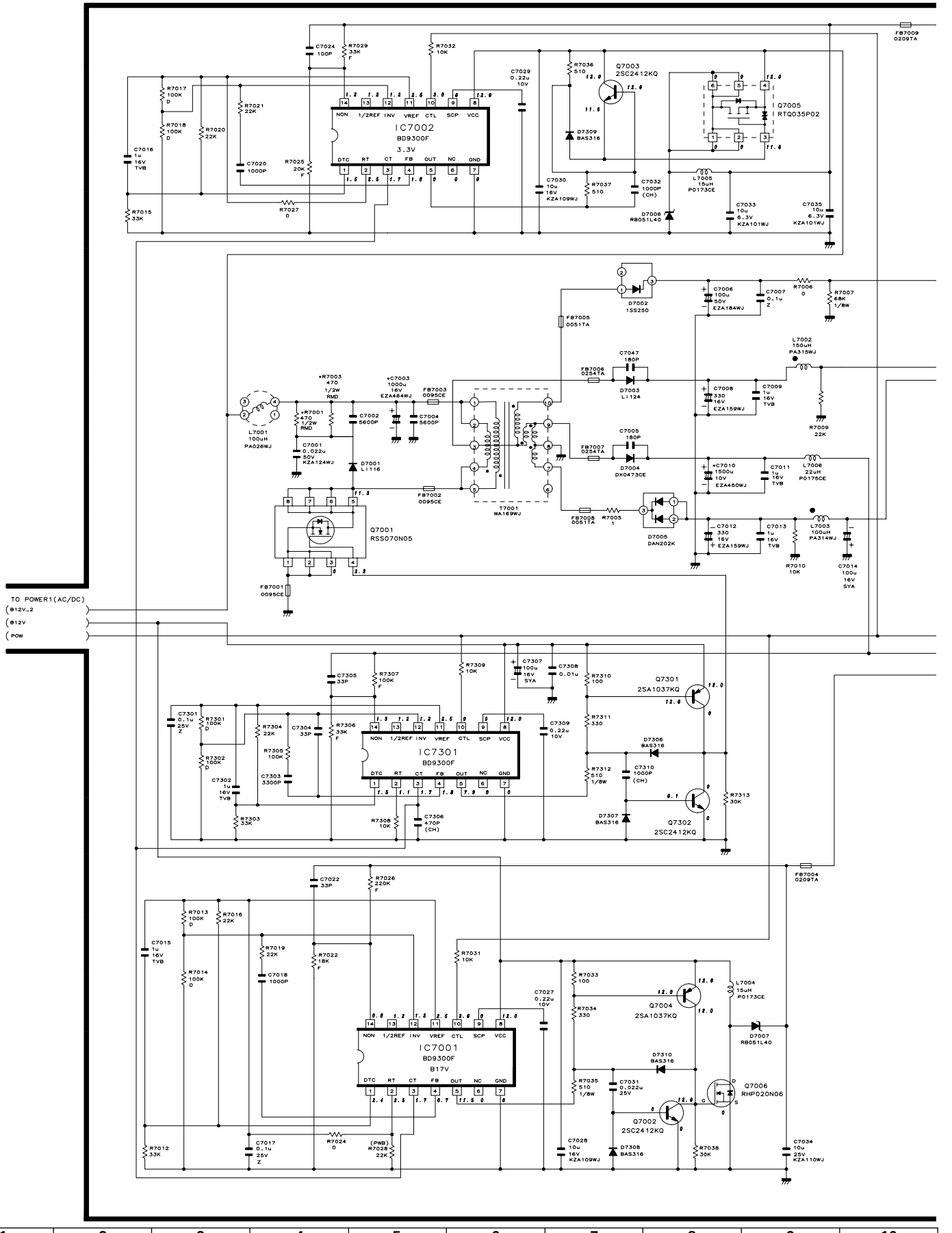


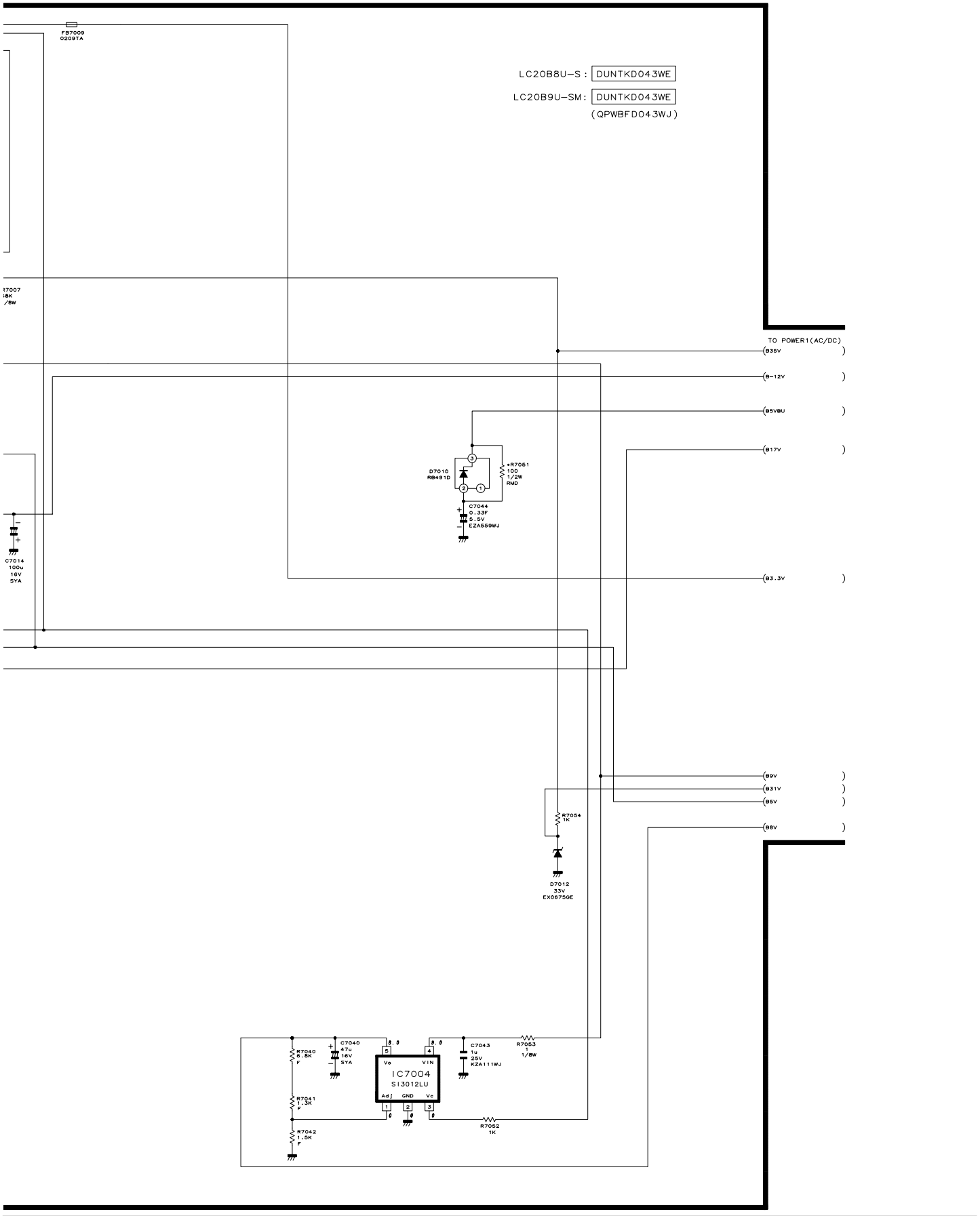


10	11	12	13	14	15	16	17	18	19

■POWER Unit-2/3 (LC-20B8U-S, LC-20B9U-SM)

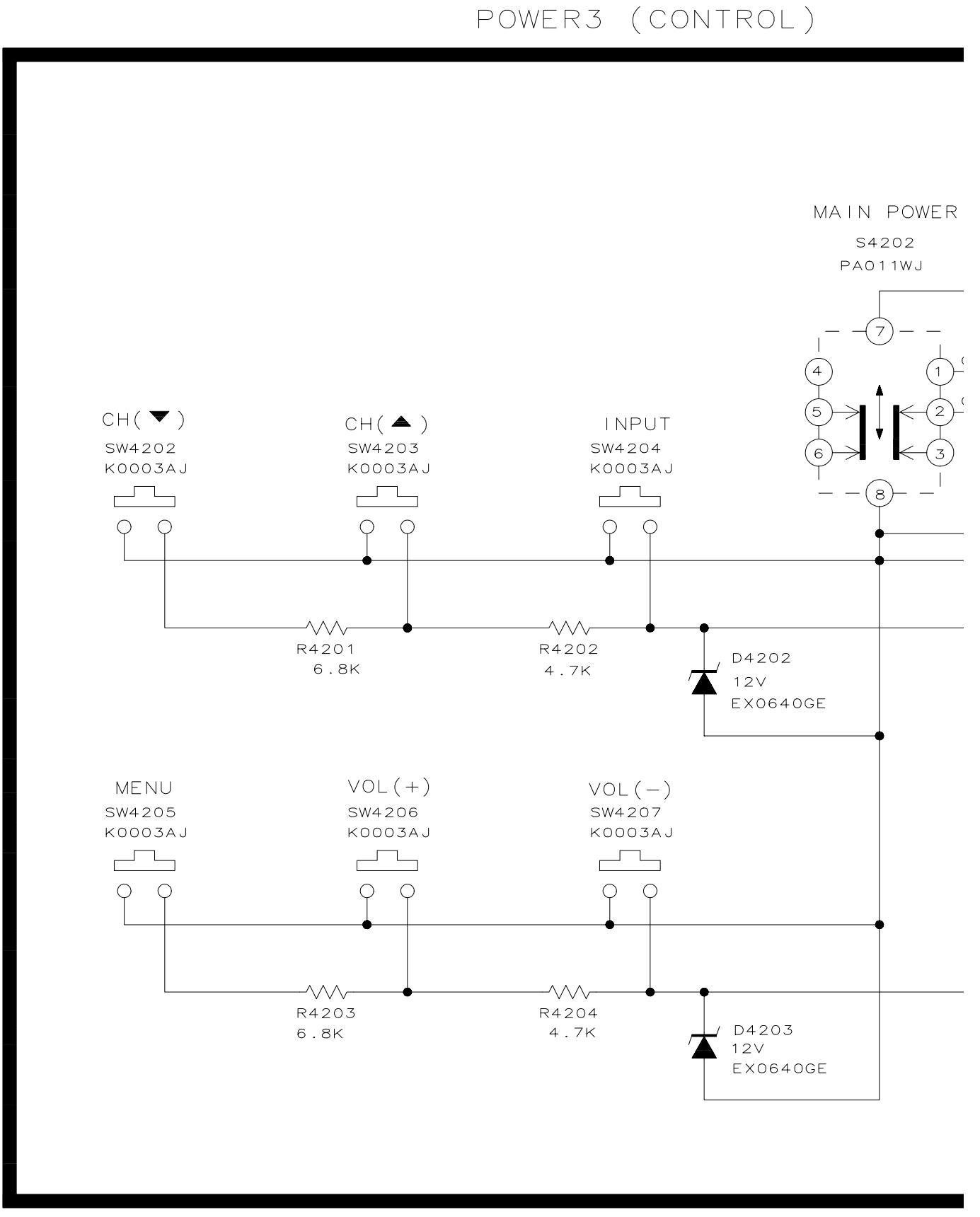
POWER2 (DC/DC)

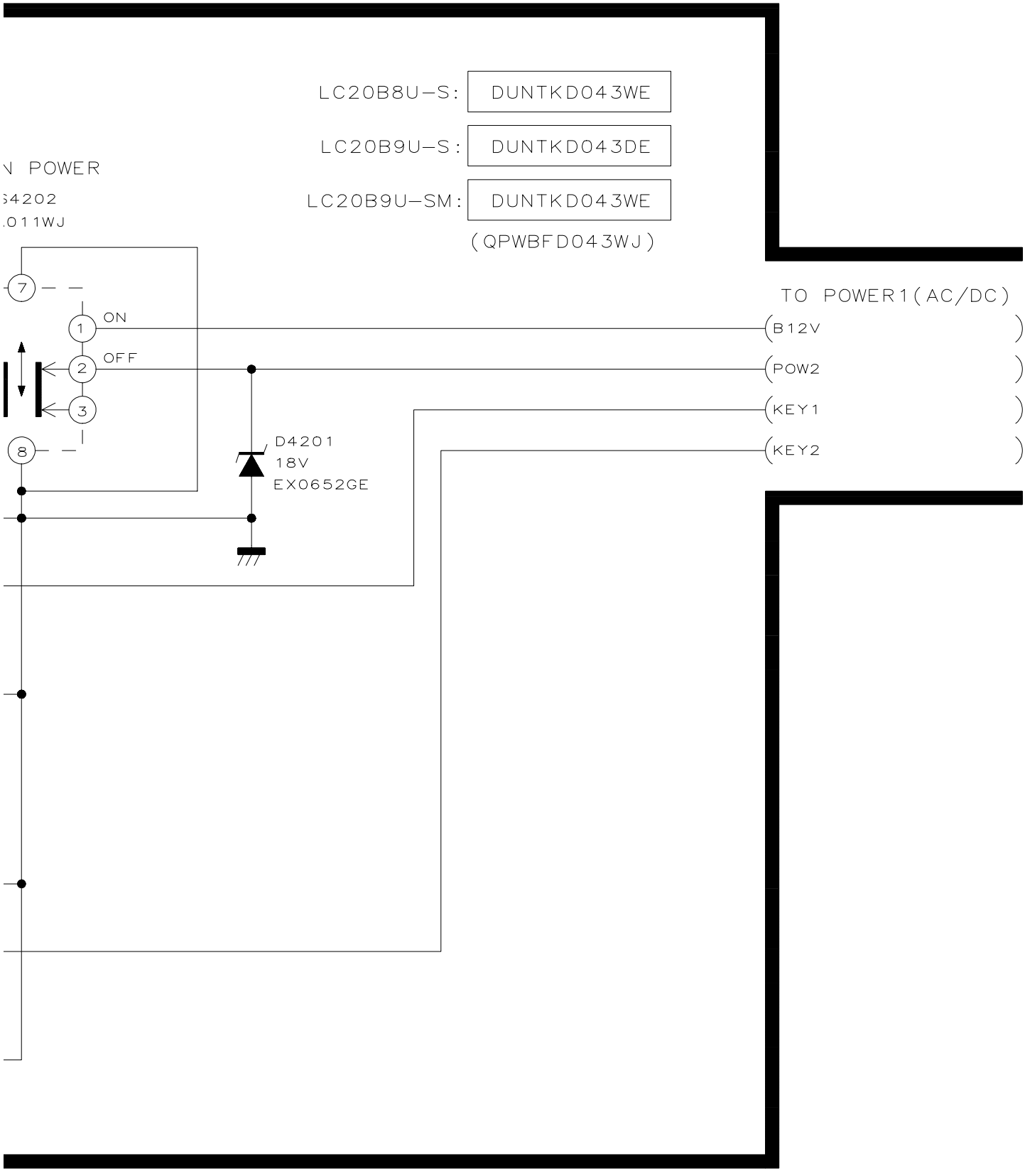




10	11	12	13	14	15	16	17	18	19

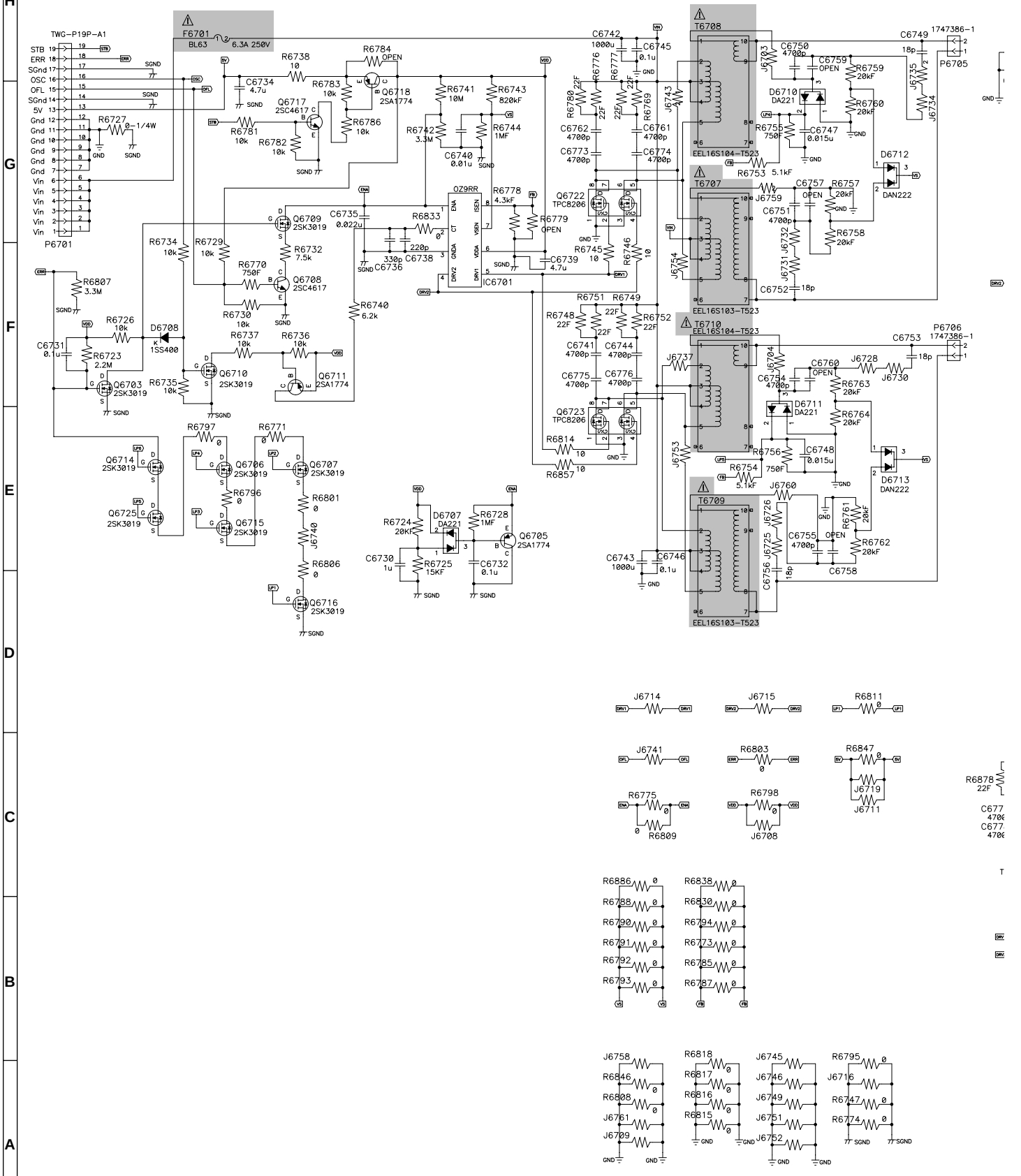
■POWER Unit-3/3

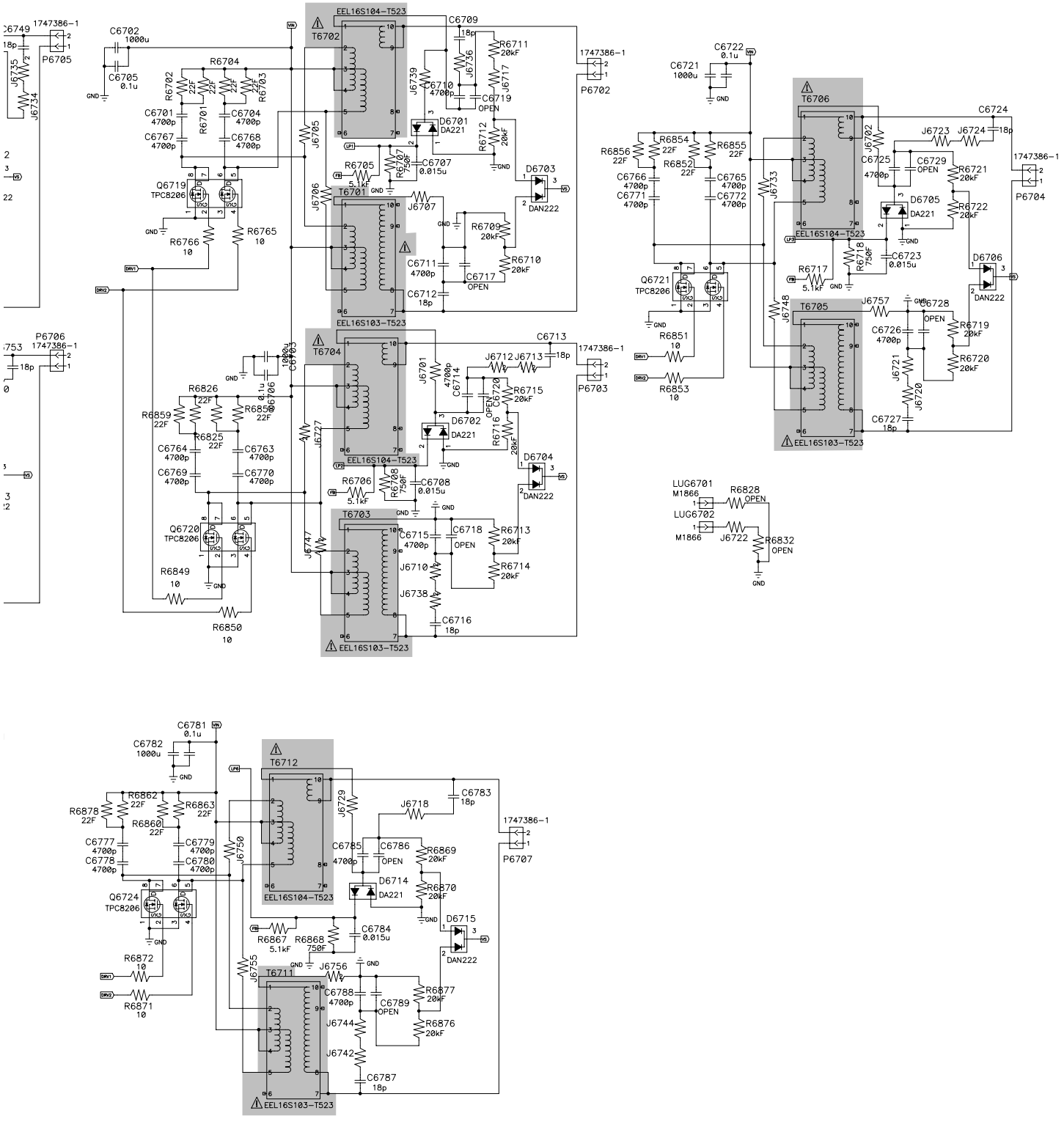




10	11	12	13	14	15	16	17	18	19

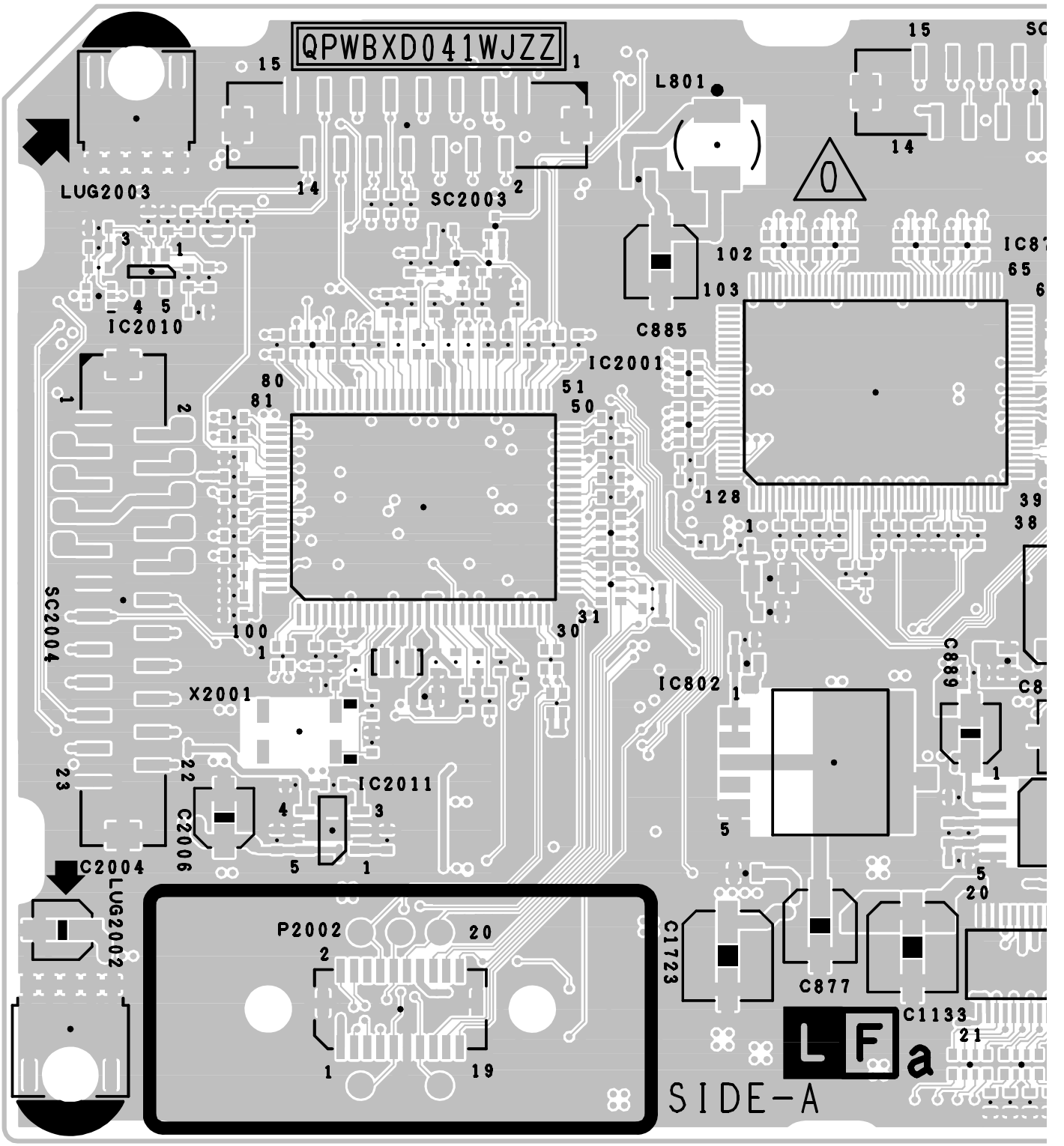
■INVERTER Unit



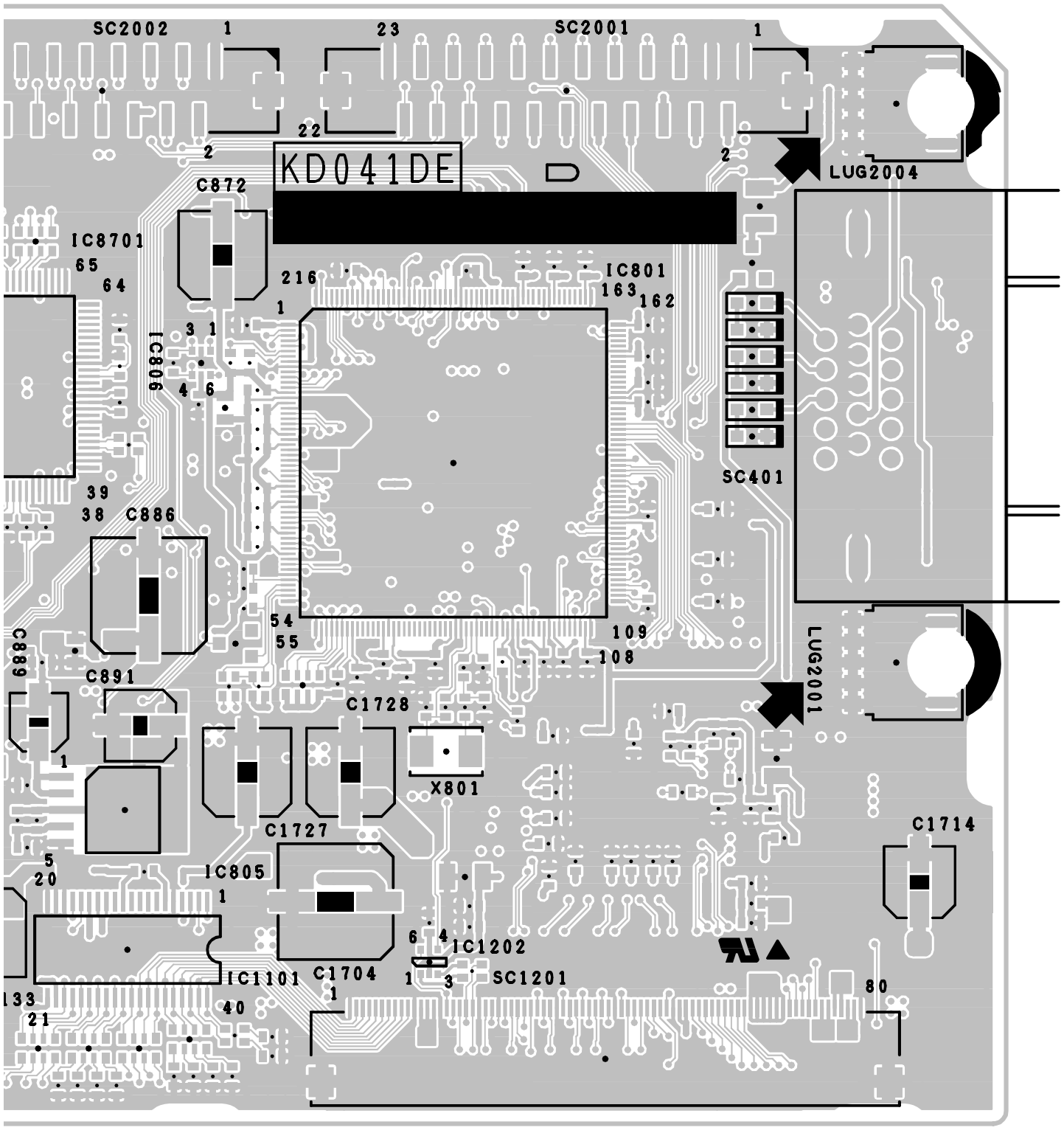


10	11	12	13	14	15	16	17	18	19

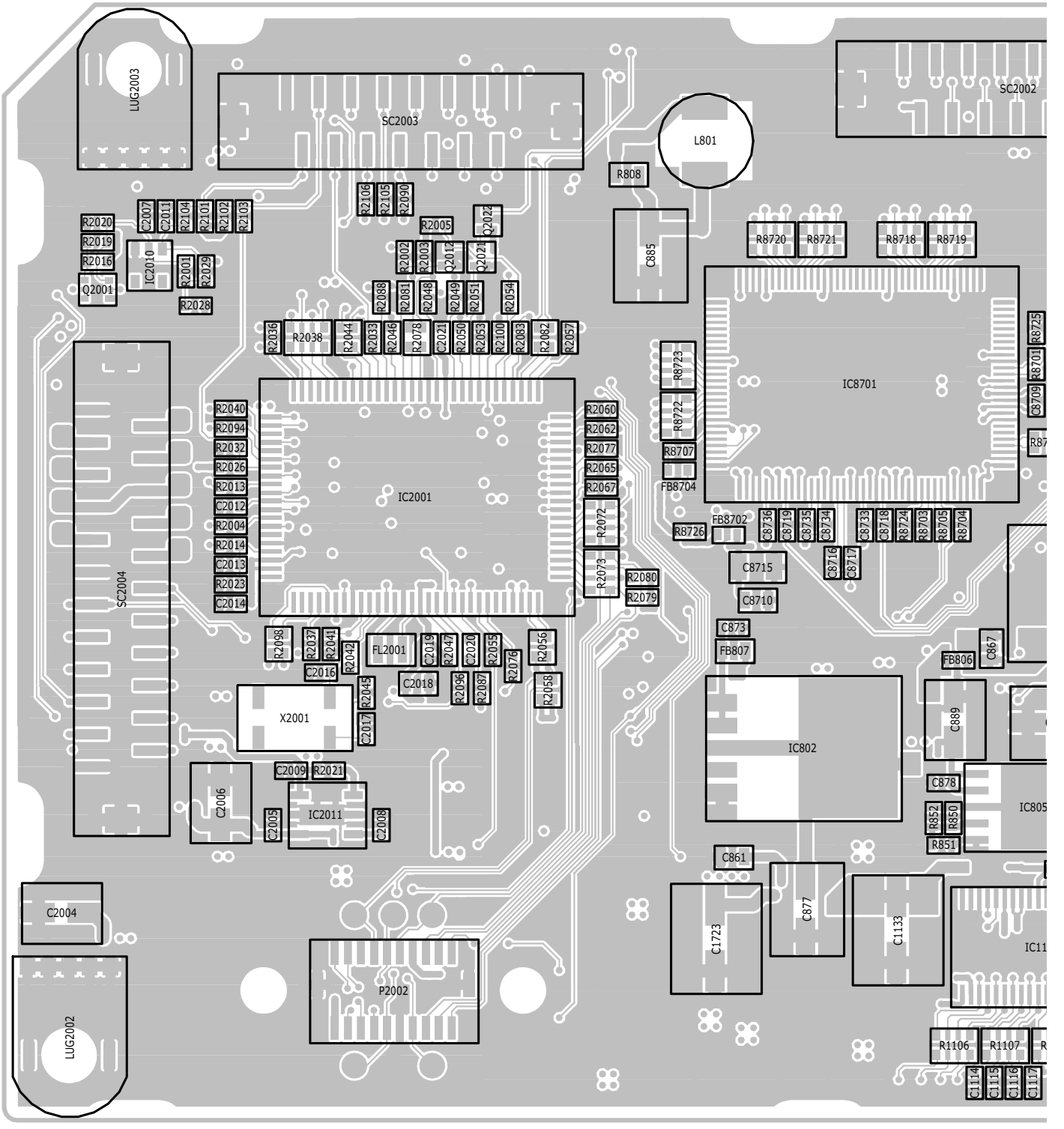
PRINTED WIRING BOARD ASSEMBLIES



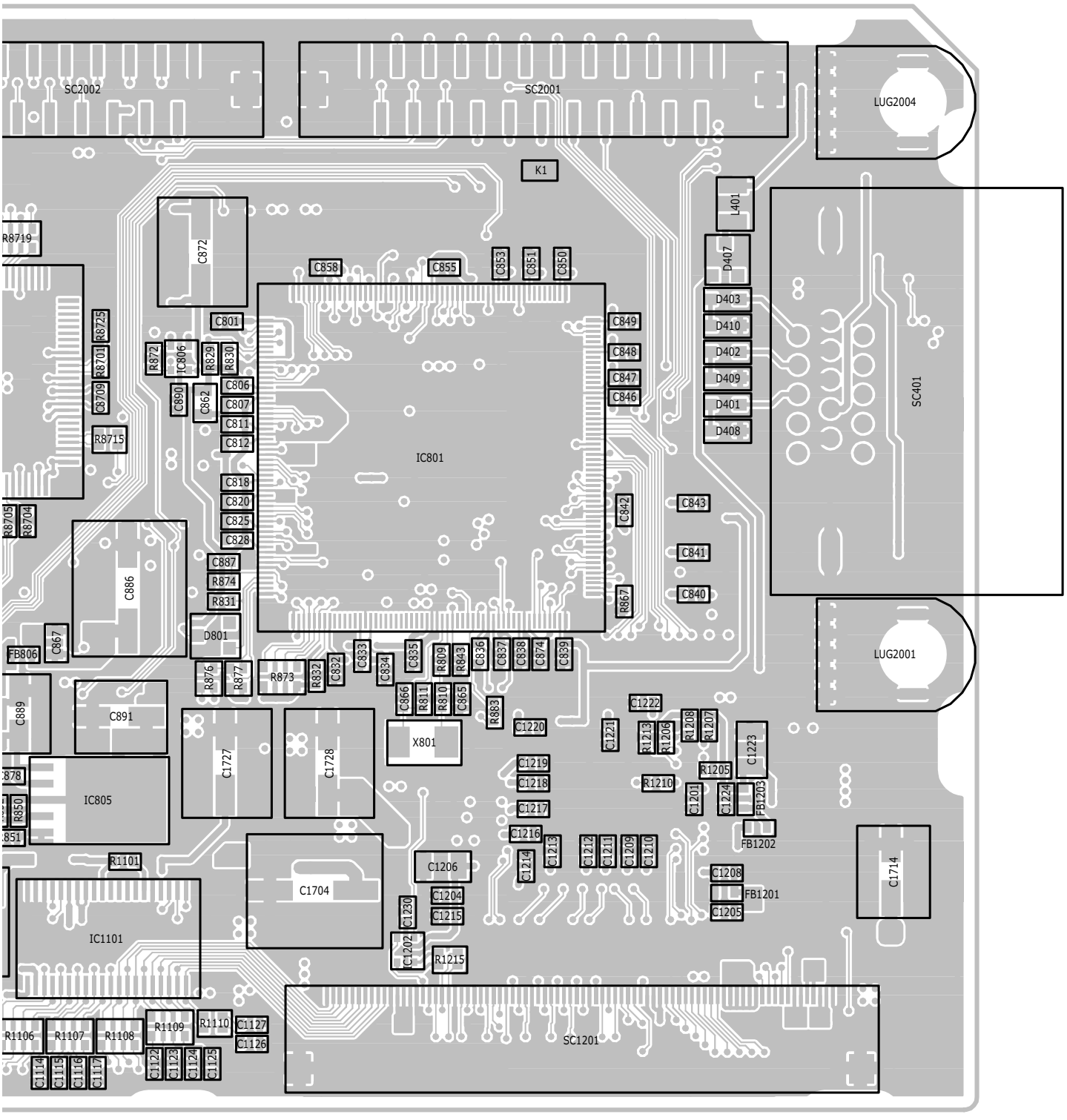
MAIN Unit (Side-A)



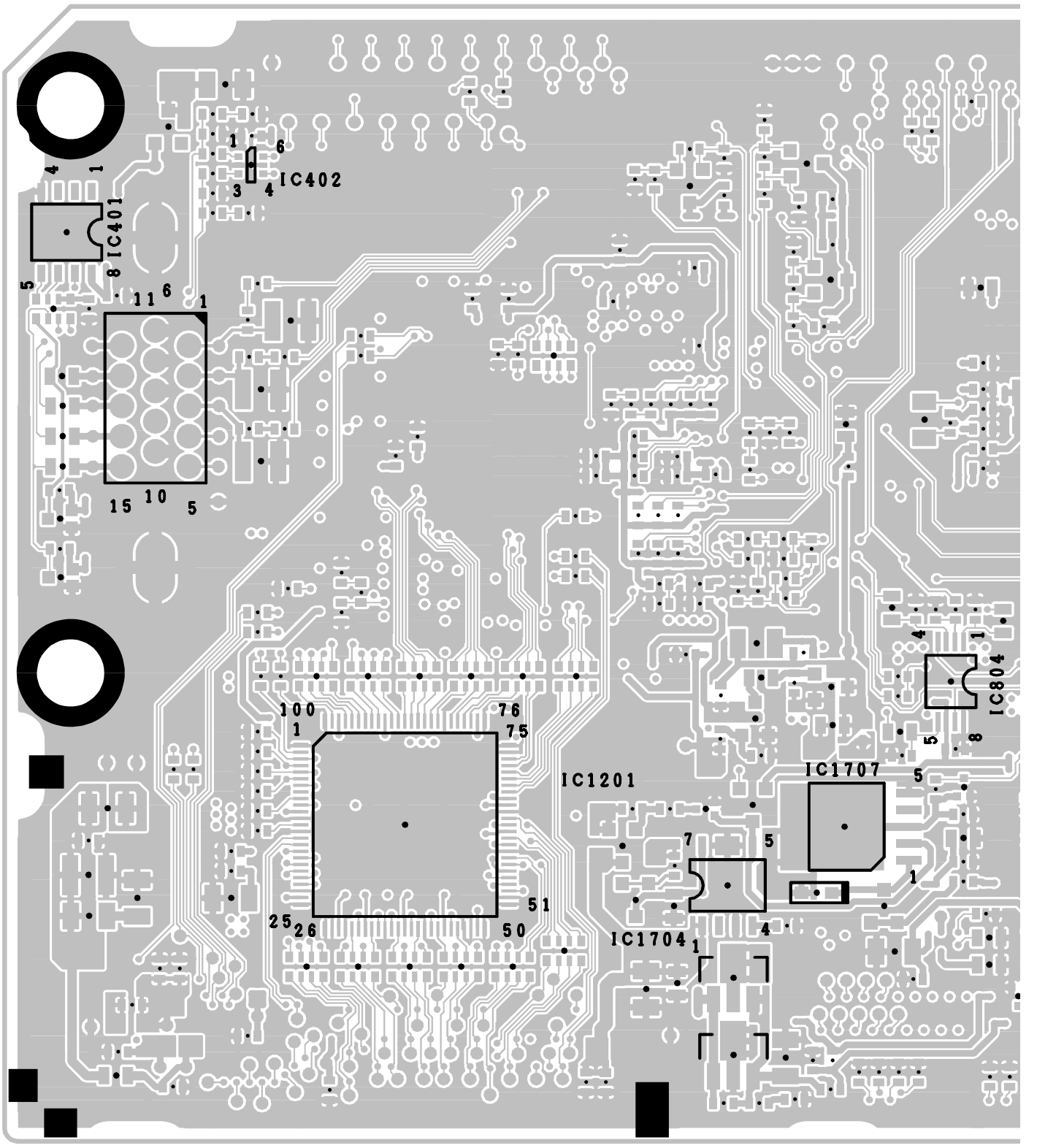
10	11	12	13	14	15	16	17	18	19



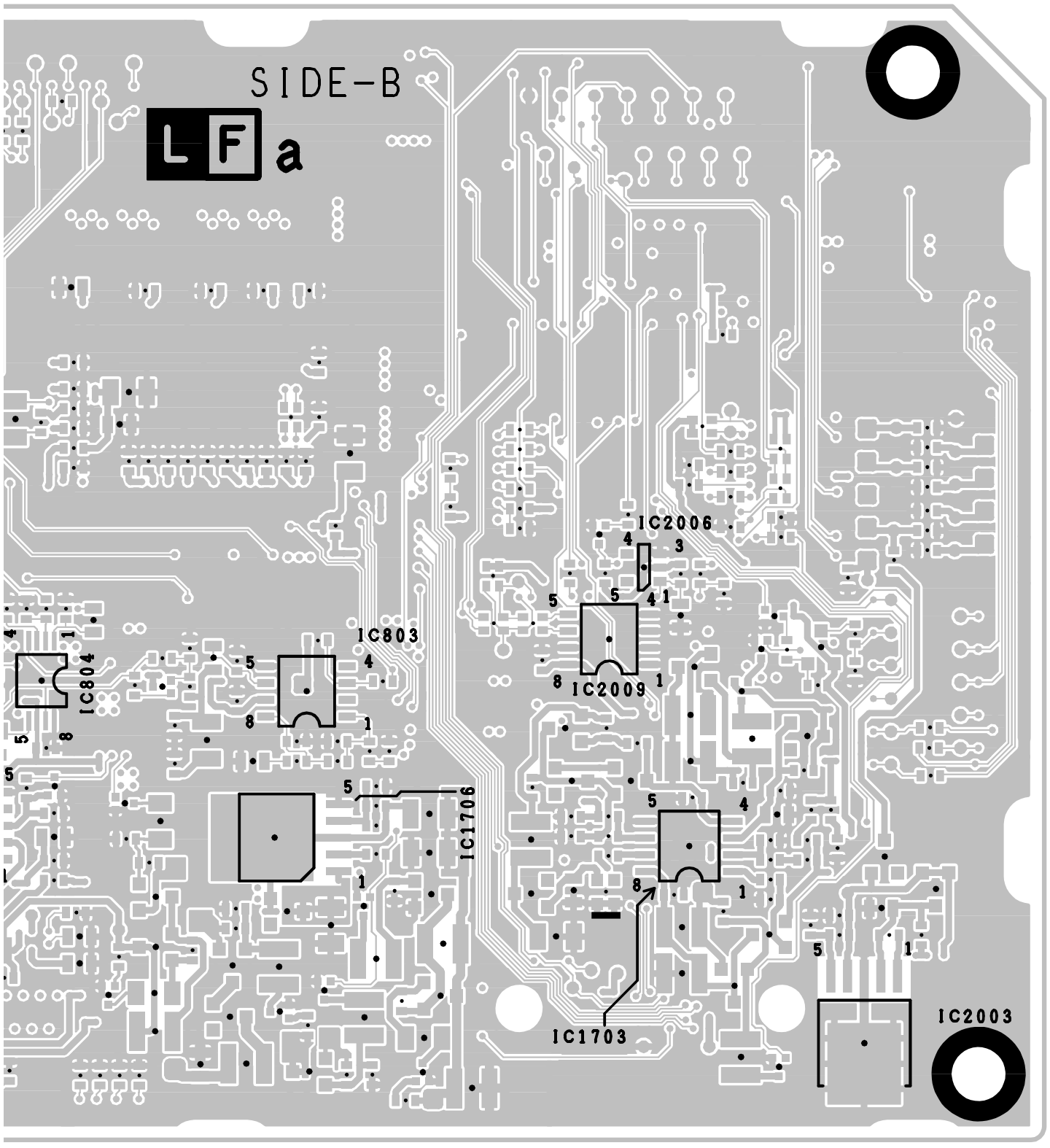
MAIN Unit (Chip Parts Side-A)



10	11	12	13	14	15	16	17	18	19



MAIN Unit (Side-B)



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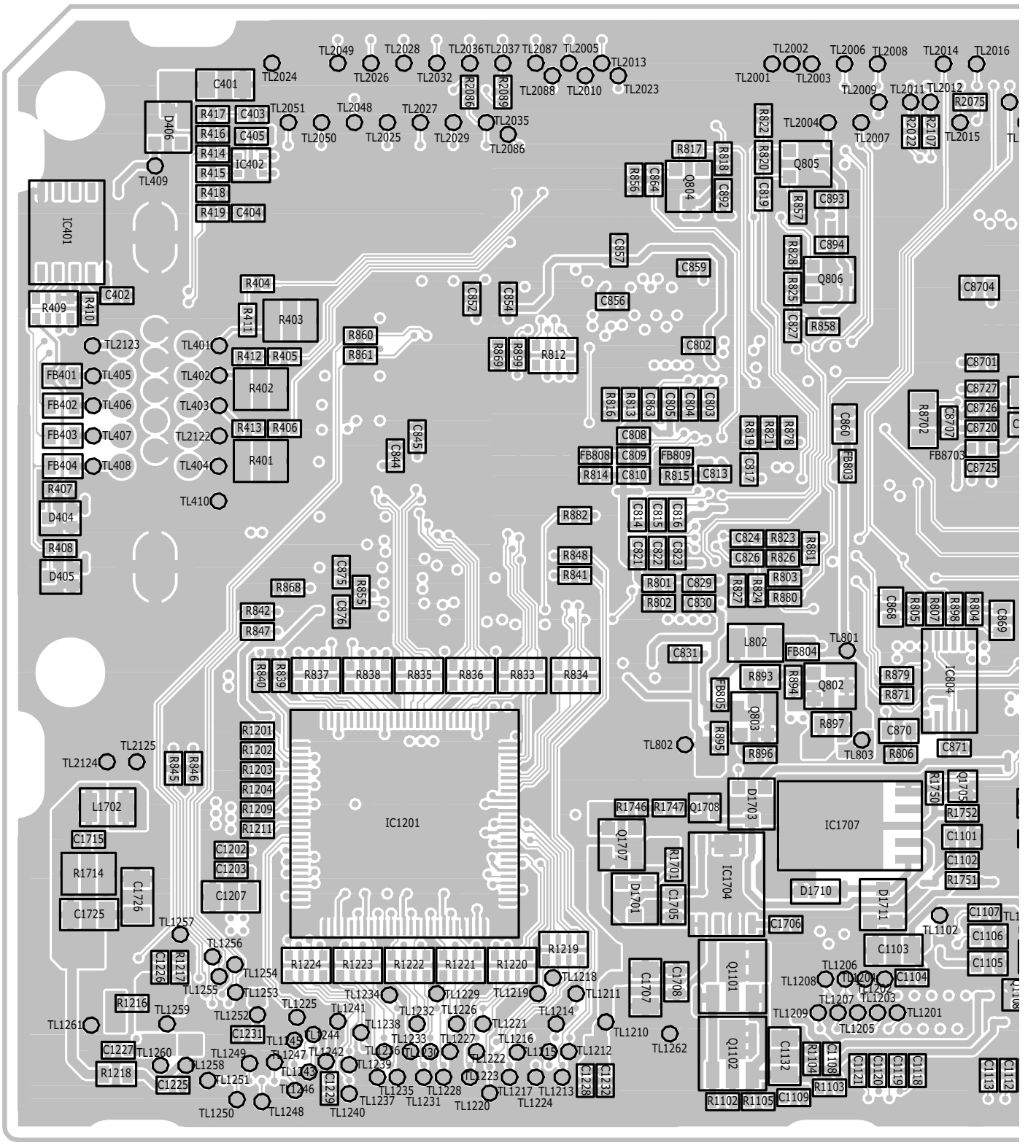
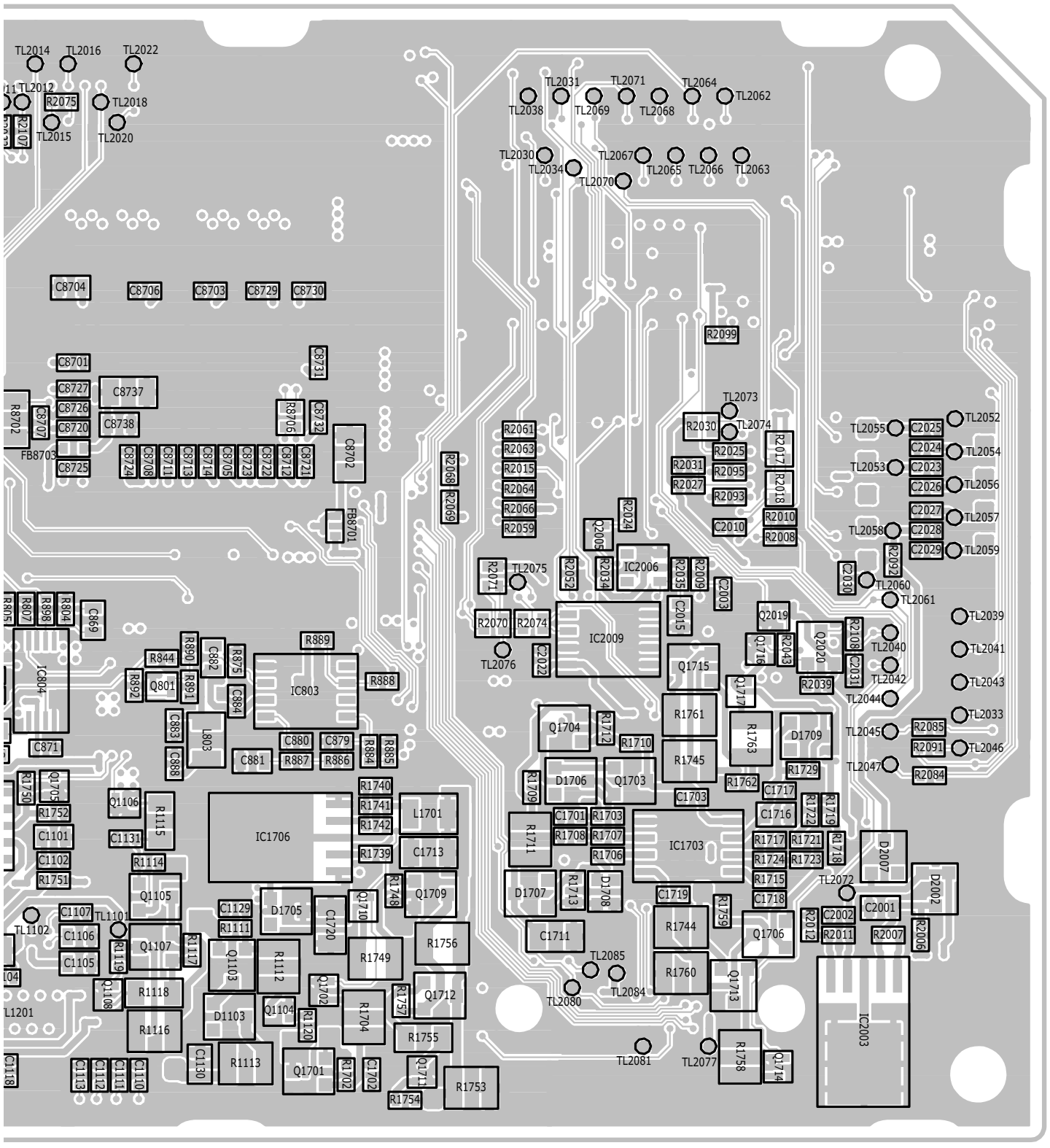


MAIN Unit (Chip Parts Side-B)



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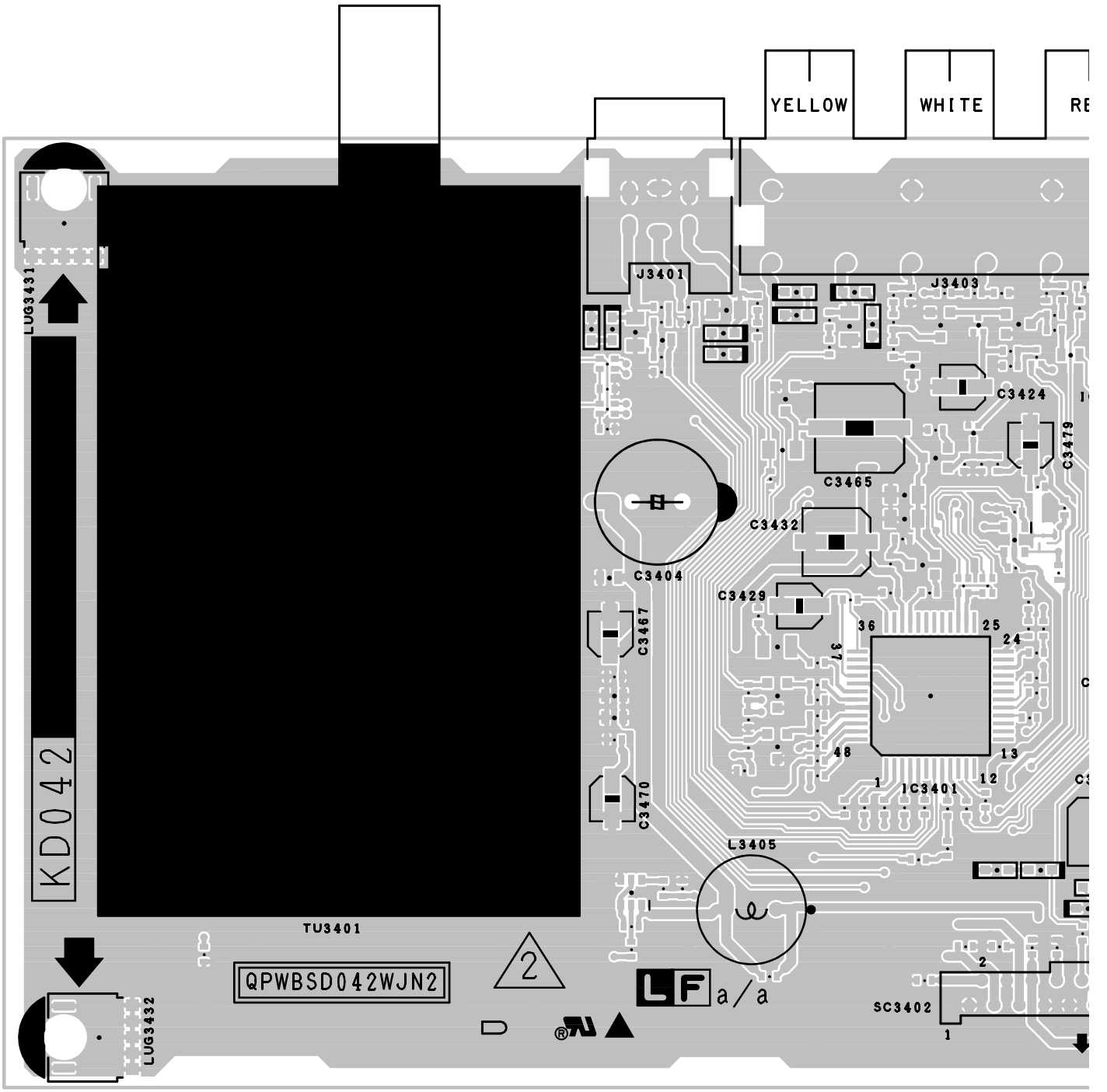
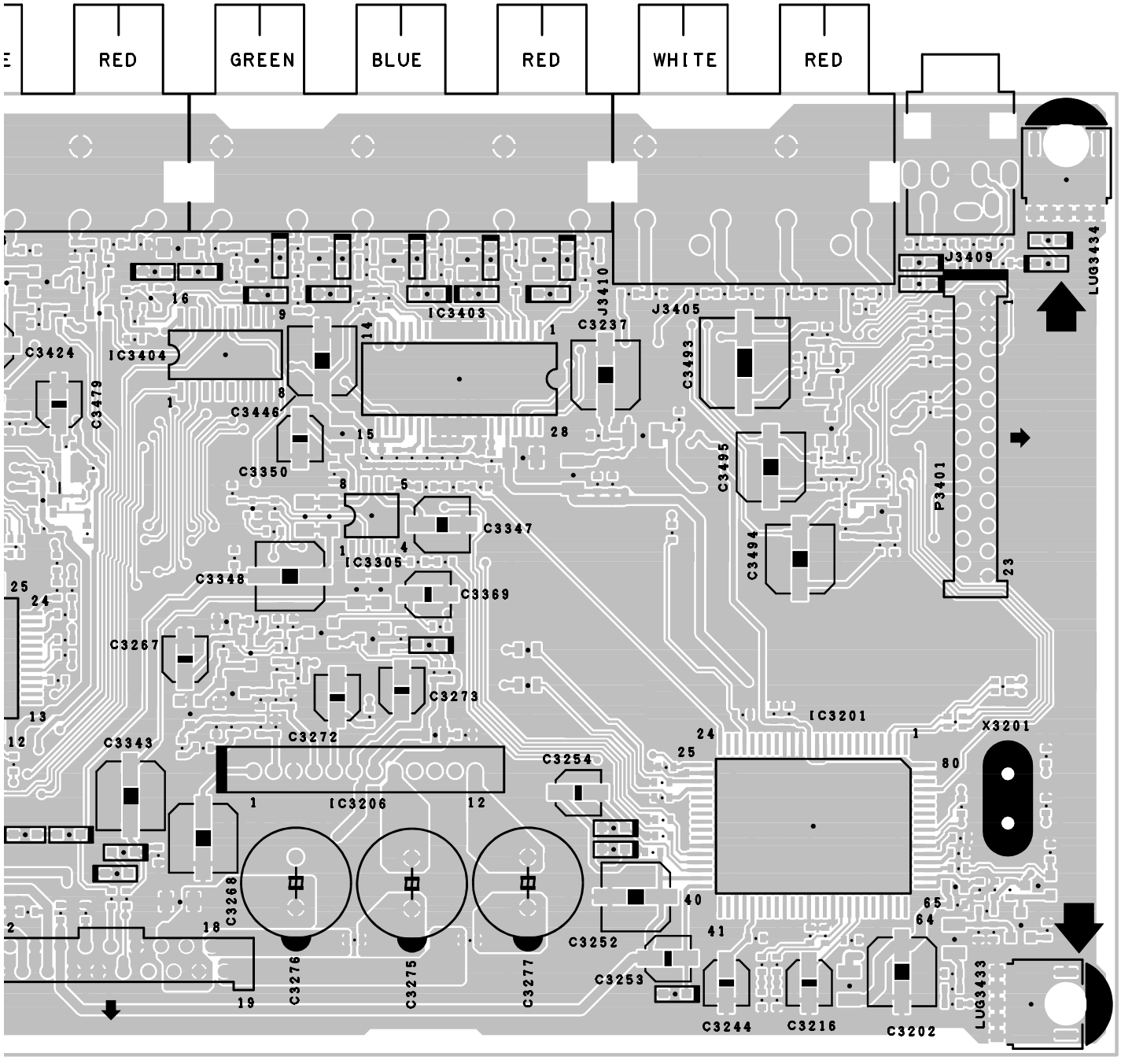


SUB Unit (Component Side)



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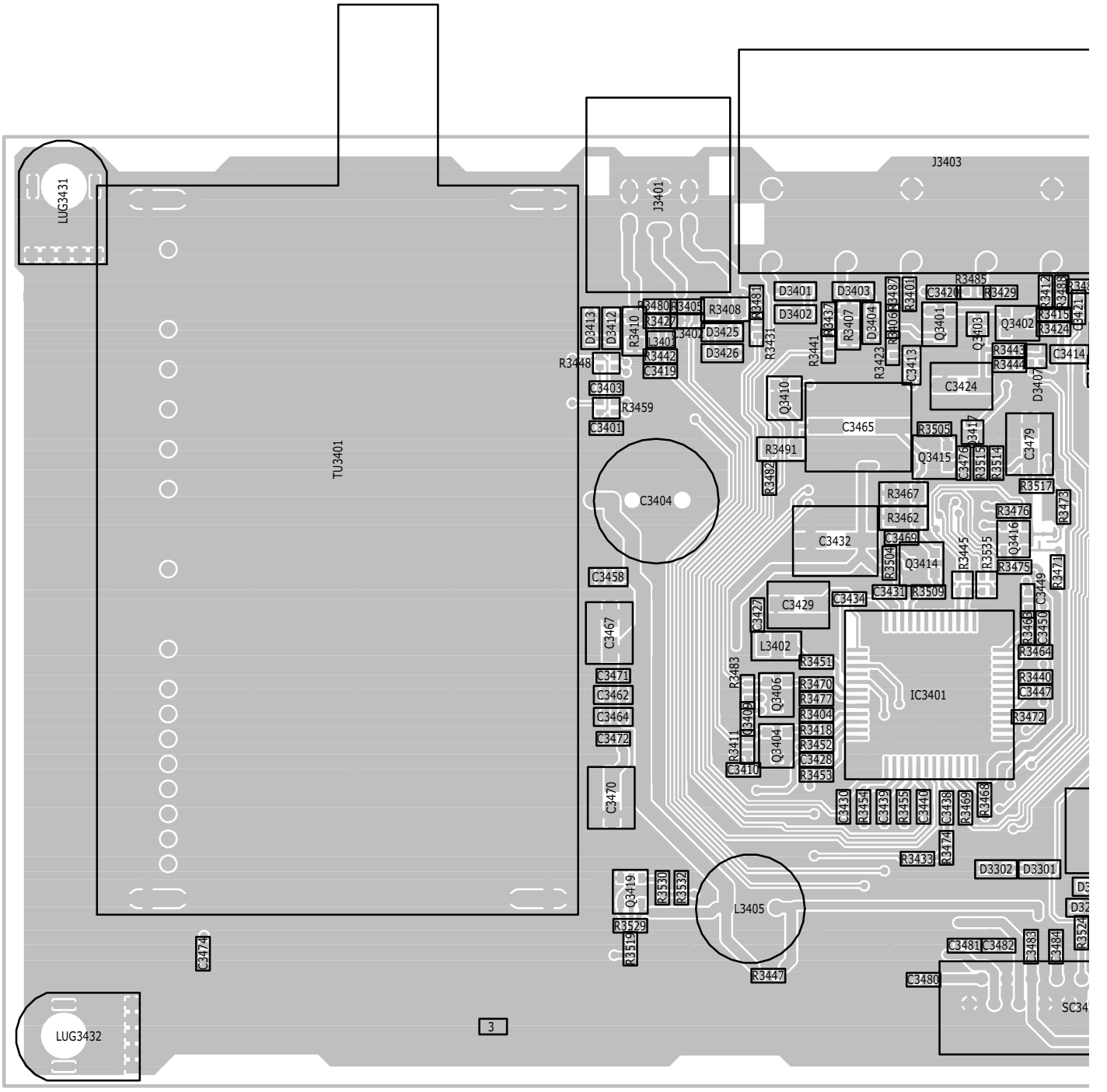
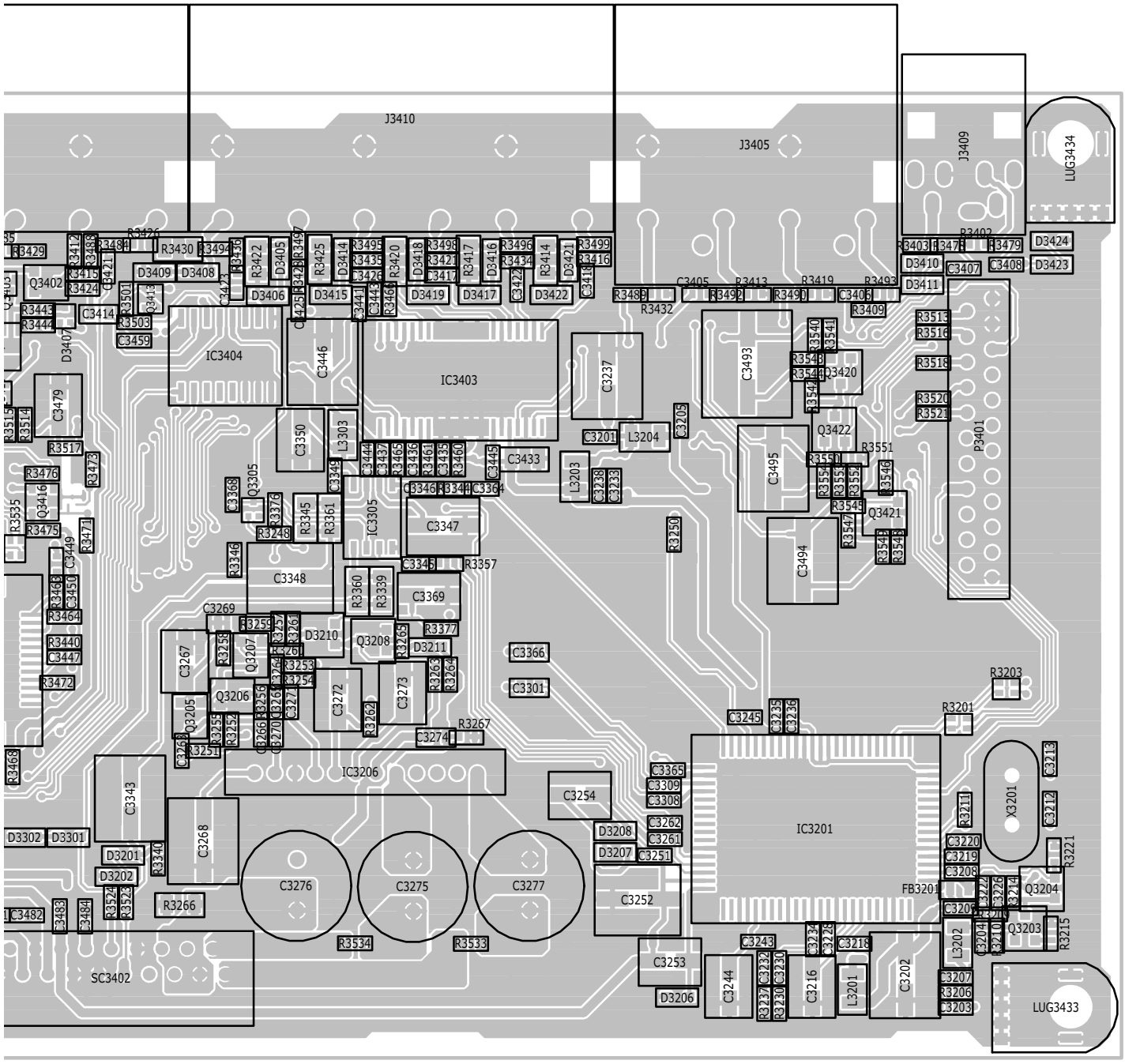


SUB Unit (Chip Parts Side)

1	2	3	4	5	6	7	8	9	10



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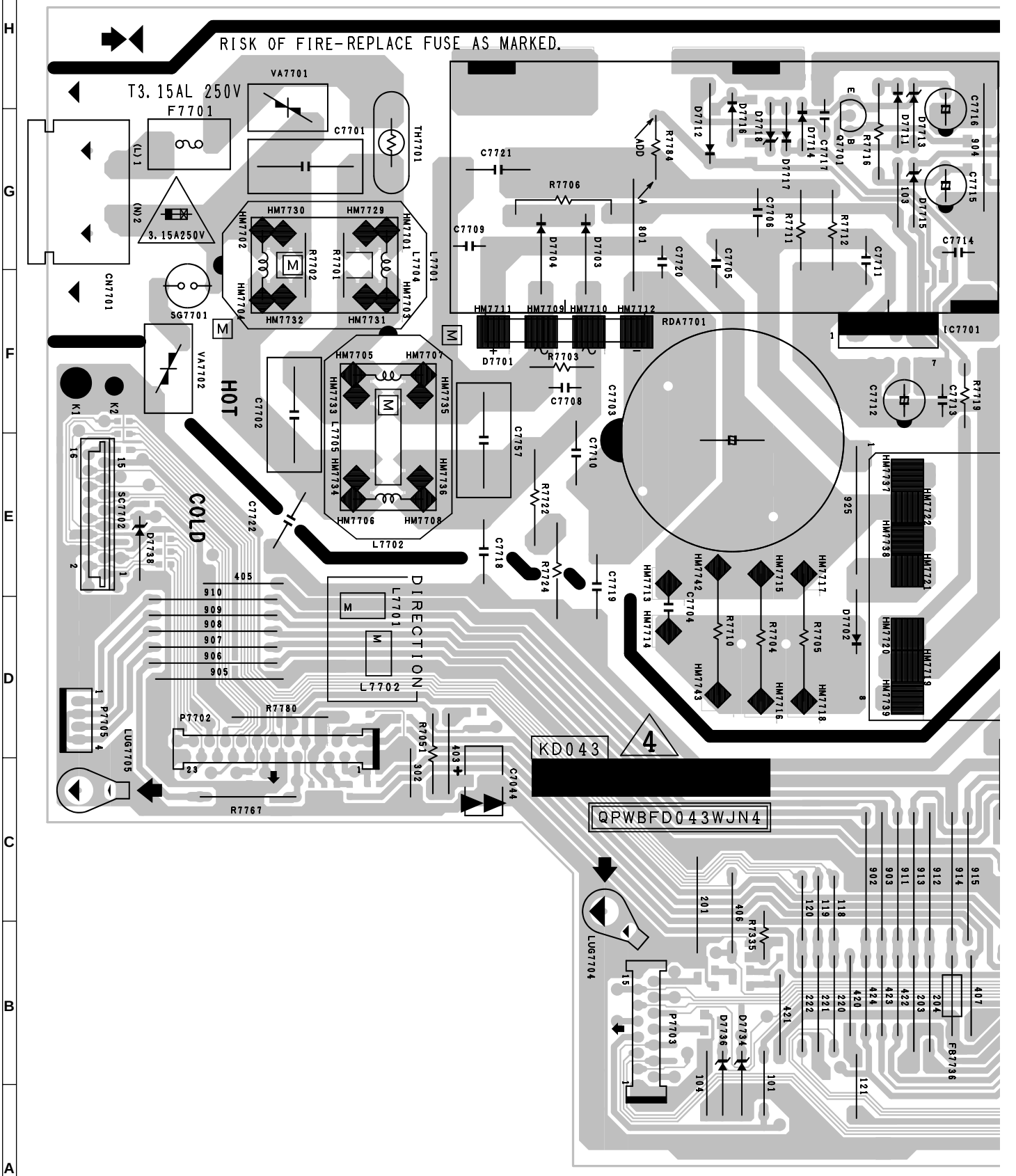
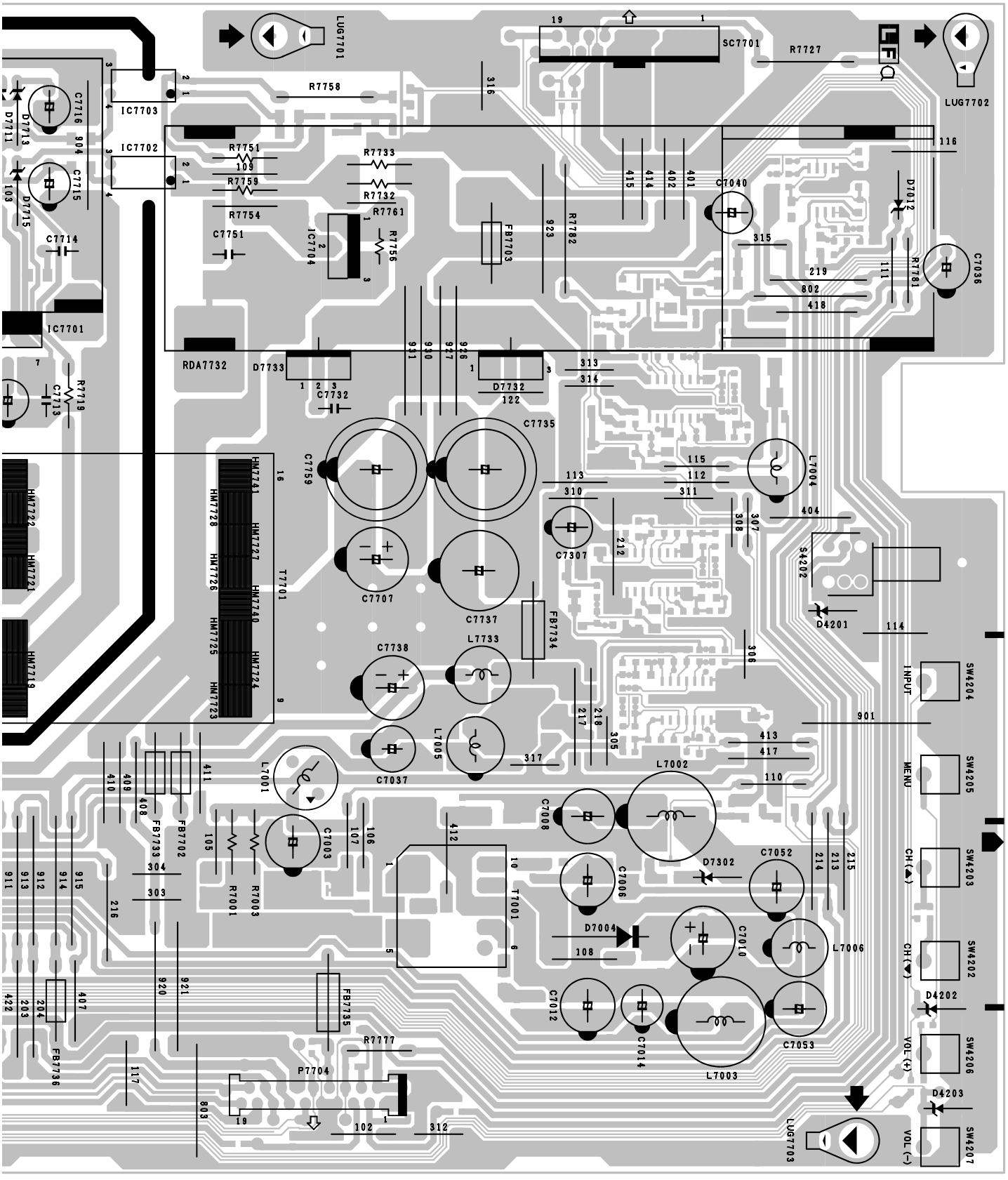


POWER Unit (Component Side)



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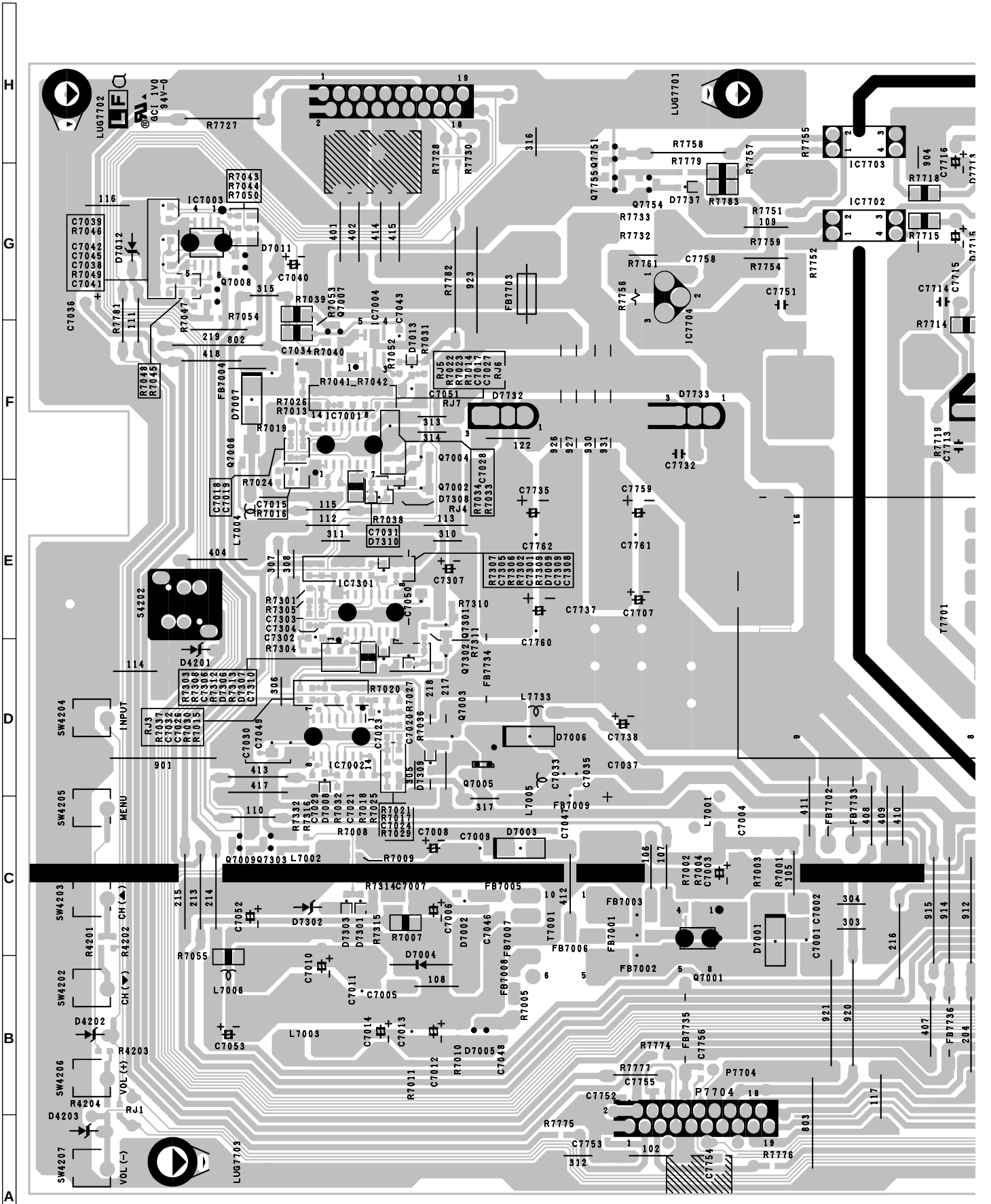
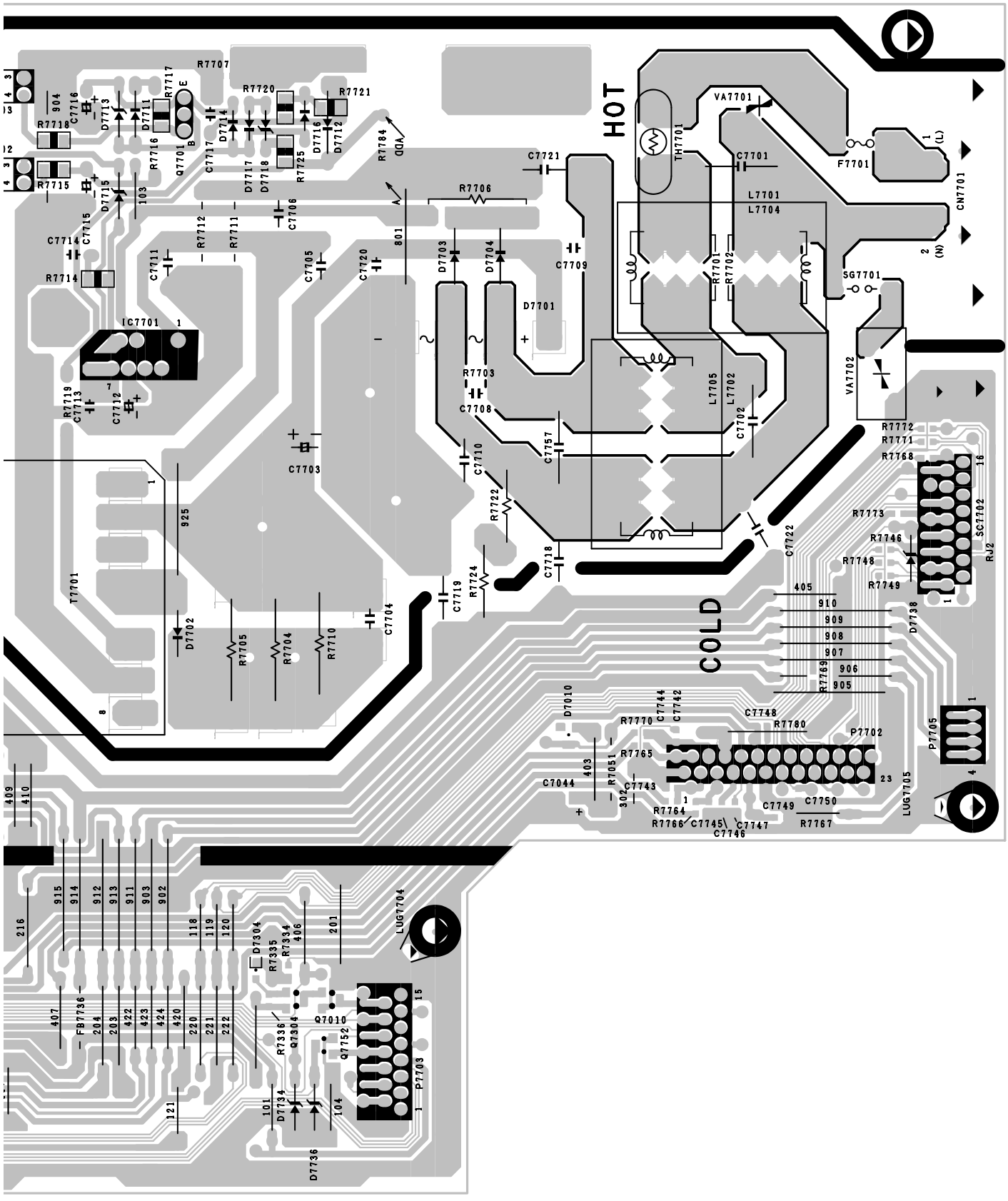


POWER Unit (Wiring Side)



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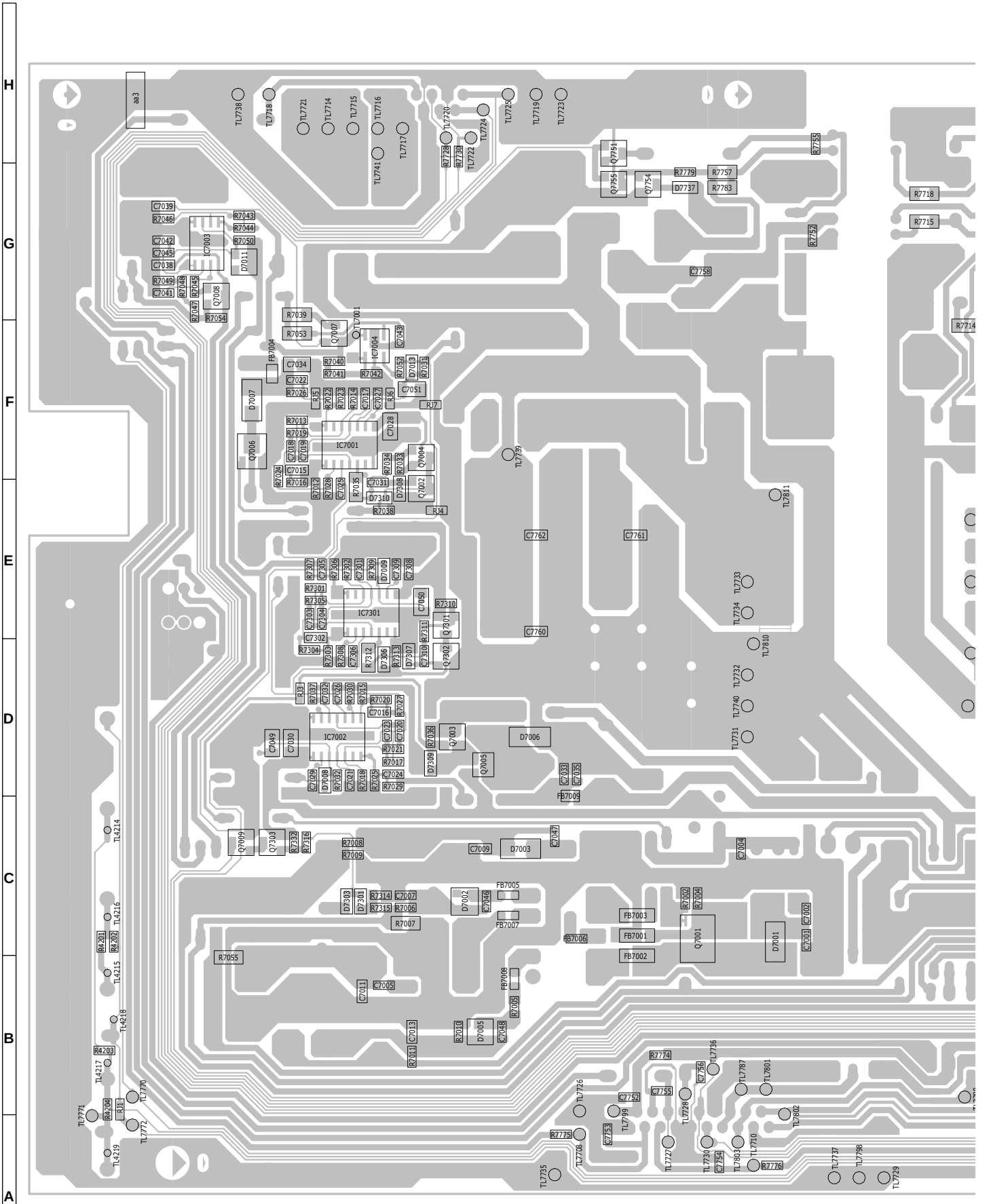
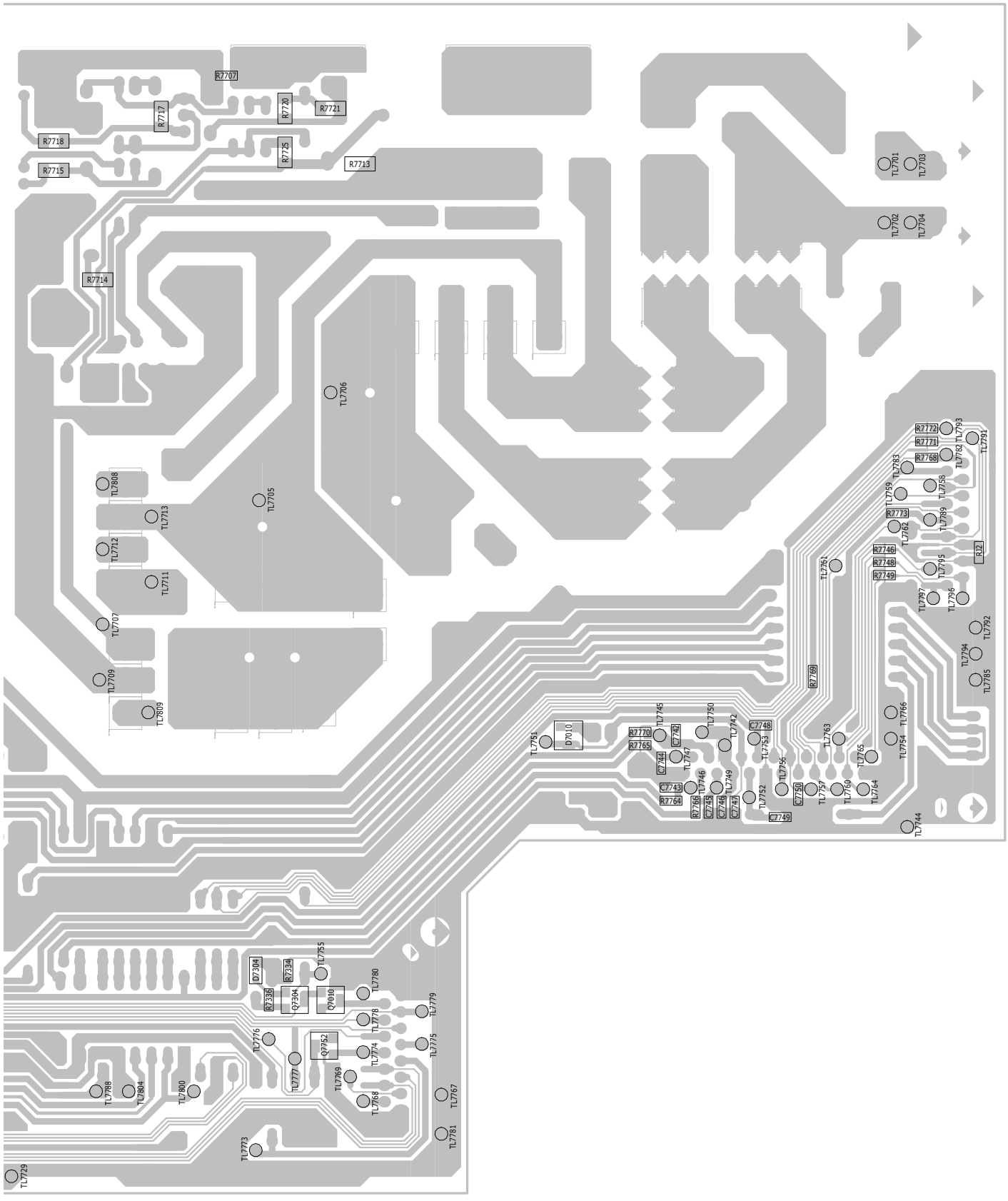


POWER Unit (Chip Parts Side)



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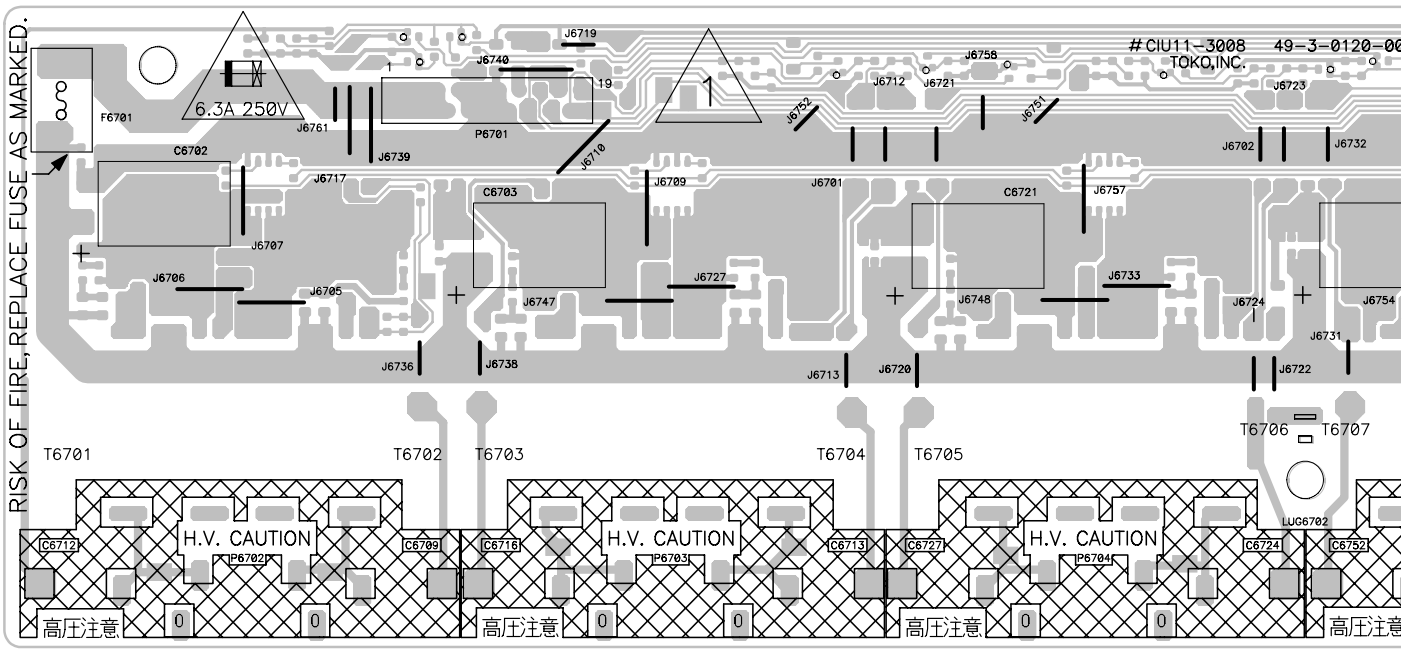
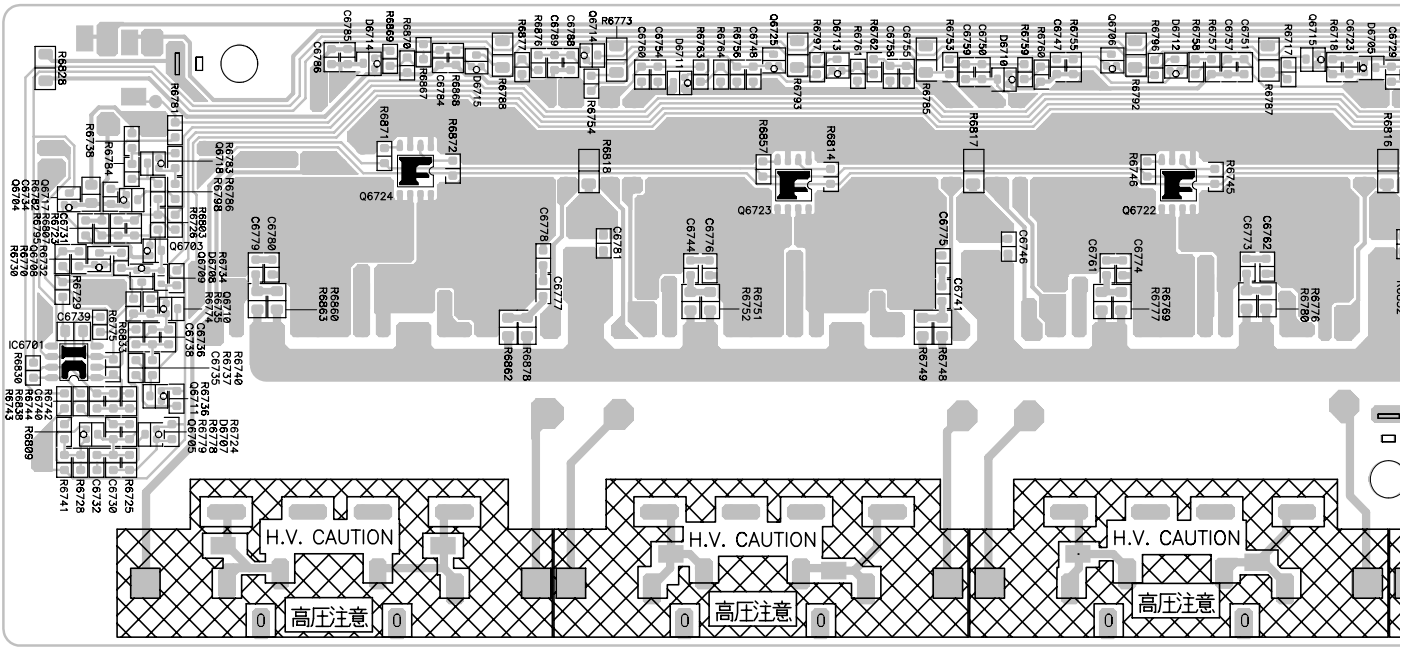
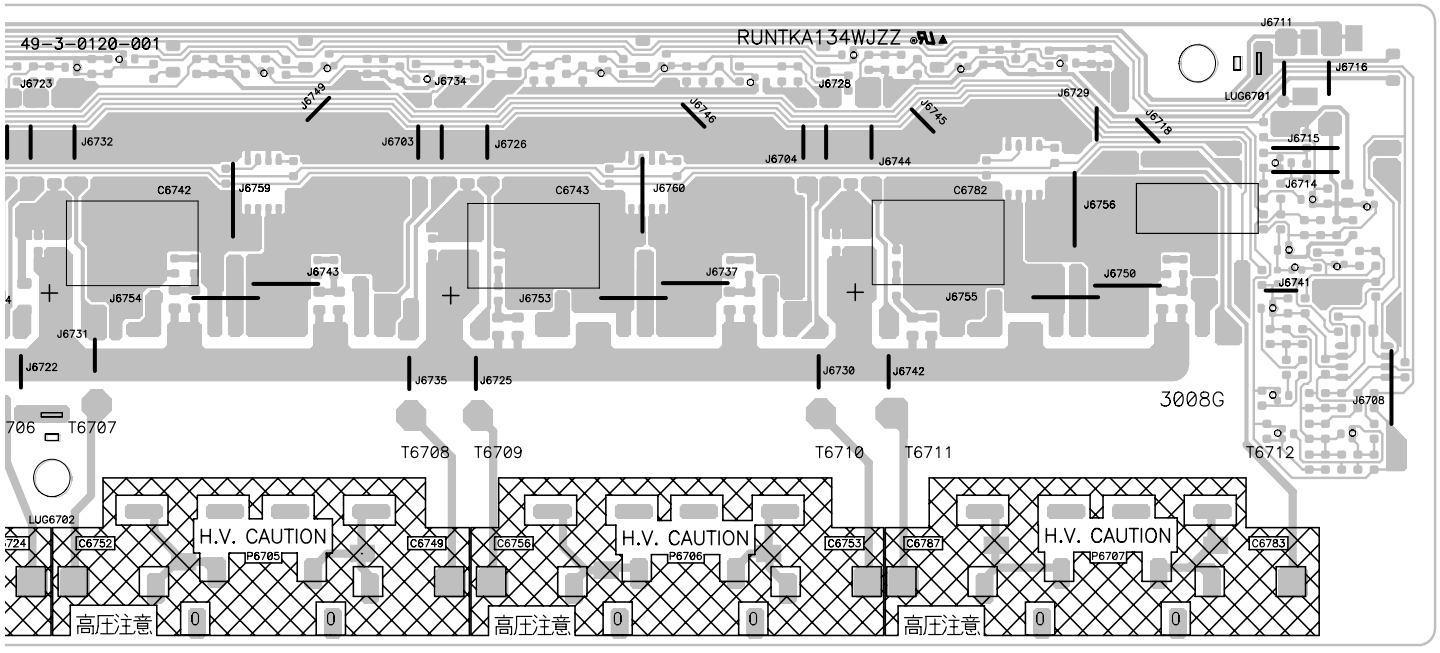
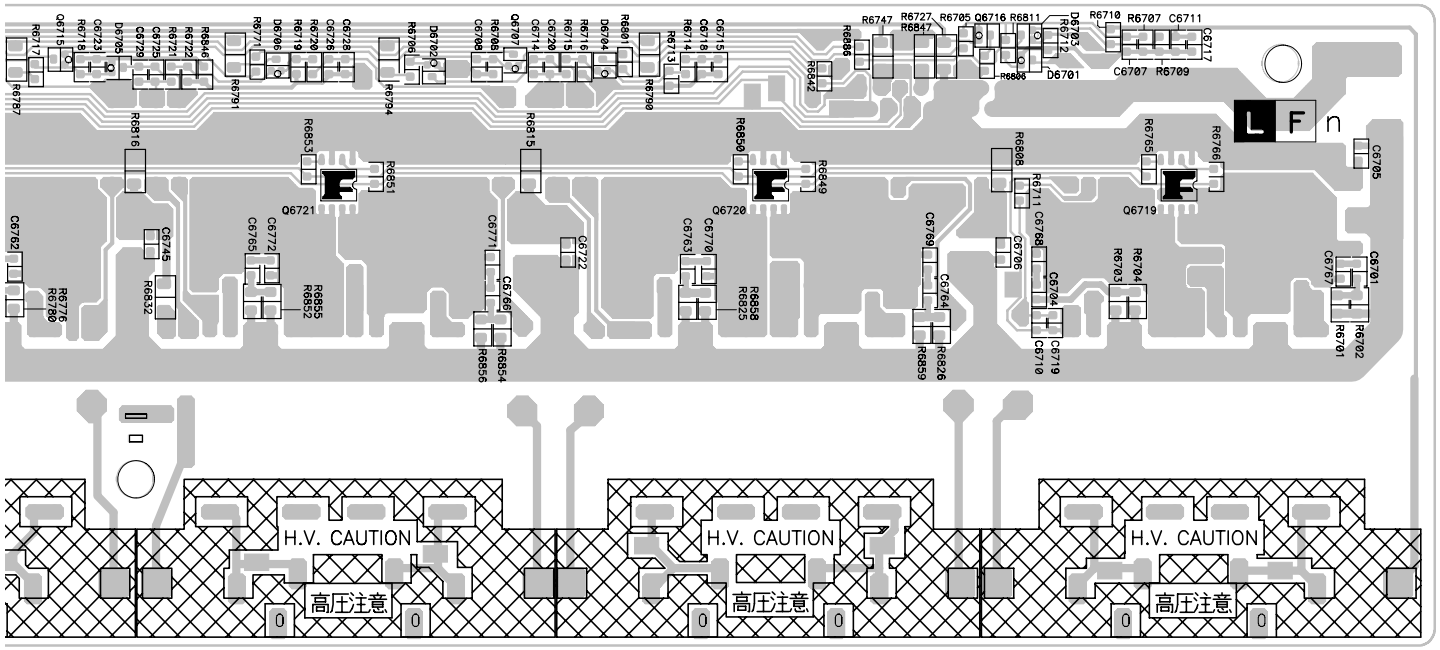


INVERTER Unit (Component Side)



INVERTER Unit (Chip Parts Side)





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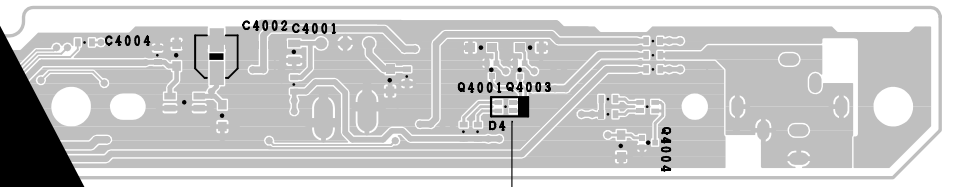
C4004
C4002
C4001
Q4001
Q4003
D4
Q4004

PARTS LIST

PARTS REPLACEMENT

Replacement parts which have these special safety characteristics identified in this manual ; electrical components having such features are identified by ⚠ and shaded areas in the Replacement Parts Lists and Schematic Diagrams. The use of a substitute replacement part which does no have the same safety characteristic as the factory recommended replacement parts shown in this service manual may create shock, fire or other hazards.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER 2. REF. NO.
3. PART NO. 4. DESCRIPTION

in **USA**: Contact your nearest SHARP Parts Distributor to order. For location of SHARP Parts Distributor, Please call Toll-Free; 1-800-BE-SHARP

★ MARK: SPARE PARTS-DELIVERY SECTION

Ref. No.	Part No.	★	Description	Code

PRINTED WIRING BOARD ASSEMBLYS *(NOT REPLACEMENT ITEM)*

LC-20B8U-S

DUNTKD041FE06	–	MAIN Unit	—
DUNTKD042WE06	–	SUB Unit	—
DUNTKD043FM06	–	POWER Unit	—
DUNTKD044WE06	–	R/C, LED Unit	—
RUNTKA134WJZZ	–	INVERTER Unit	—

LC-20B9U-S

DUNTKD041FE03	–	MAIN Unit	—
DUNTKD042DE03	–	SUB Unit	—
DUNTKD043FE03	–	POWER Unit	—
DUNTKD044DE03	–	R/C, LED Unit	—
RUNTKA134WJZZ	–	INVERTER Unit	—

LC-20B9U-SM

DUNTKD041FE03	–	MAIN Unit	—
DUNTKD042WE03	–	SUB Unit	—
DUNTKD043FM03	–	POWER Unit	—
DUNTKD044WE03	–	R/C, LED Unit	—
RUNTKA134WJZZ	–	INVERTER Unit	—

LCD PANEL

NOTE: THE PARTS HERES SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.

RLCDTA031WJZZ	J	20" LCD Panel Unit	DC

LISTE DES PIECES

CHANGE DES PIECES

Les pi`eces de rechange qui pr élelesentent ces caract éleristiques sp éleciales de s élecurit éle, sont identifi élees dans ce manuel : les pi`eces élelectriques qui pr élesentent ces particularit éles, sont rep éler élee par la marque ⚠ et sont hachur élees dans les listes de pi`eces et dans les diagrammes sch élematiques.
La substitution d'une pi`ece de rechange par une autre qui ne pr éLesente pas les m éoemes caract éLeristiques de s élecurit éle que la pi`ece recommand élee parl'usine et dans ce manuel de service, peut provoquer une éLelectrocution, un incendie ou toutautre sinistre.

"COMMENT COMMANDER LES PIECES DE RECHANGE"

Pour que votre commande soit rapidement et correctement remplie, veuillez fournir les renseignements suivants.

1. NUMERO DU MODELE 2. NO. DE REF
3. NO. DE PIECE 4. DESCRIPTION

in **CANADA**: Contact SHARP Electronics of Canada Limited Phone (416) 890-2100

★ MARQUE: SECTION LIVRAISON DES PIECES DERECHANGE

Ref. No.	Part No.	★	Description	Code

DUNTKD041FE03 (LC-20B9U-S/SM) DUNTKD041FE06 (LC-20B8U-S)

MAIN Unit

INTEGRATED CIRCUITS

IC401	VHiBR24C21F-1Y	J	BR24C21F-E2	AG
IC402	VHiNC7WZ14P-1Y	J	NC7WZ14P6X	AD
IC801	RH-iXB170WJZZQ	J	R8J66604A02FP	BR
IC802	VHiPQ018EH1-1Y	J	PQ018EH01ZPH	AF
IC805	VHiPQ20WZ11-1Y	J	PQ20WZ1U	AF
IC1101	VHiBD8132FV-1Y	J	BD8132FV-E2(LC-20B9U-S)	AX
IC1101	VHiBD8133FV-1Y	J	BD8133FV-E2 (LC-20B8U-S,LC-20B9U-SM)	AS
IC1201	RH-iXB075WJZZQ	J	LR38875	AX
IC1202	VHiFSA4157+-1Y	J	FSA4157P6X	AE
IC1703	VHiNJM2147M-1Y	J	NJM2147M-TE1	AF
IC1706	VHiPQ20WZ11-1Y	J	PQ20WZ1U	AF
IC2001	RH-iXA628WJN1Q	J	M30626FHPFPU5C (LC-20B9U-S)	BC
IC2001	RH-iXA628WJZZQ	J	M30622MWP-253F (LC-20B8U-S,LC-20B9U-SM)	AV
IC2003	VHiSi3010KM-1Y	J	SI-3010KM-TL	AF
IC2006	VHiPST3229N1EY	J	PST3229	AD
IC2009	VHiBR24L32F-1Y	J	BR24L32F-WE2	AG
IC2010	VHiPST3229N1EY	J	PST3229	AD
IC2011	VHiPQ1L333M-1Y	J	PQ1L333M2SP	AD
IC8701	VHiAD988810-1Q	J	AD9888KSZ-100	BA

TRANSISTORS

Q802	VSFMMT718//-1Y	J	FMMT718	AE
Q803	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q804	VS2SC3928AR-1Y	J	2SC3928AR (LC-20B8U-S,LC-20B9U-SM)	AB
Q805	VS2SC3928AR-1Y	J	2SC3928AR (LC-20B8U-S,LC-20B9U-SM)	AB
Q1101	VS2SC4520//-1Y	J	2SC4520	AE
Q1102	VS2SA1729//-1Y	J	2SA1729	AF
Q1103	VSFMMT718//-1Y	J	FMMT718	AE
Q1104	VSDTC144EE/-1Y	J	DTC144EE	AA
Q1105	VS2SA1037KQ-1Y	J	2SA1037KQ	AA
Q1106	VSDTC114EE/-1Y	J	DTC114EE	AB
Q1107	VS2SA1037KQ-1Y	J	2SA1037KQ	AA
Q1108	VSDTC114EE/-1Y	J	DTC114EE	AB
Q1701	VS2SA1037KQ-1Y	J	2SA1037KQ	AA
Q1702	VSDTC144EE/-1Y	J	DTC144EE	AA
Q1703	VS2SA1036K/-1Y	J	2SA1036K	AC
Q1706	VS2SC3928AR-1Y	J	2SC3928AR	AB

DUNTKD041FE03 (LC-20B9U-S/SM)
DUNTKD041FE06 (LC-20B8U-S)
MAIN Unit (Continued)

Ref. No.	Part No.	★	Description	Code
Q1707	VSFMMT718//-1Y	J	FMMT718	AE
Q1708	VSDTC144EE/-1Y	J	DTC144EE	AA
Q1713	VS2SA1037KQ-1Y	J	2SA1037KQ	AA
Q1714	VSDTC144EE/-1Y	J	DTC144EE	AA
Q1715	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q1716	VSDTC144EE/-1Y	J	DTC144EE	AA
Q1717	VSDTA144EE/-1Y	J	DTA144EE	AA
Q2001	VSRN4984///-1Y	J	RN4984	AC
Q2005	VSDTC114EE/-1Y	J	DTC114EE	AB
Q2012	VSDTC144EE/-1Y	J	DTC144EE	AA
Q2019	VSDTC114EE/-1Y	J	DTC114EE	AB
Q2020	VS2SA1037KQ-1Y	J	2SA1037KQ	AA
Q2021	VSDTC144EE/-1Y	J	DTC144EE	AA
Q2022	VSDTA144EE/-1Y	J	DTA144EE	AA

DIODES

D404	VHDDAN217U+-1Y	J	Diode	AB
D405	VHDDAN217U+-1Y	J	Diode	AB
D406	VHD1SS250//1EY	J	Diode	AB
D407	VHD1SS250//1EY	J	Diode	AB
D801	VHDDAN202K/-1Y	J	Diode	AB
D1103	VHD1SS250//1EY	J	Diode	AB
D1703	VHDDAN202K/-1Y	J	Diode	AB
D1705	VHDDAN202K/-1Y	J	Diode	AB
D1706	VHDDAN202K/-1Y	J	Diode	AB
D1707	VHD1SS250//1EY	J	Diode	AB
D1708	VHDRB481K++-1Y	J	Diode	AD
D1709	VHDDAN202K/-1Y	J	Diode	AB
D2002	VHDDAN202K/-1Y	J	Diode	AB
D2007	VHDRB491D++-1Y	J	Diode	AD

PACKAGED CIRCUITS

X801	RCRSCA097WJZZY	J	Crystal, 54MHz	AG
X2001	RCRSC0032TAZZY	J	Crystal, 32.768kHz	AG

FILTER AND COILS

FL2001	RFiLZA003WJPZY	J	Filter, 16MHz	AD
L401	VPCNN220J2R9NY	J	Peaking 22µH	AB
L802	VPCNN220J2R9NY	J	Peaking 22µH (LC-20B9U-S)	AB
L1701	VPCKM1R2JR44NY	J	Peaking 1.2µH	AB
L1702	VPCNN470J5R4NY	J	Peaking 47µH	AB

CAPACITORS

C401	RC-KZA108WJZZY	J	10	10V	Ceramic	AC
C402	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C403	VCCCCY1HH330JY	J	33p	50V	Ceramic	AA
C404	VCCCCY1HH330JY	J	33p	50V	Ceramic	AA
C405	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C801	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C802	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C803	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C804	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C805	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C806	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C807	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C808	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C809	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C810	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C811	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C812	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C813	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C814	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C815	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C816	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C817	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C818	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C819	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C820	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C821	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C822	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C823	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C824	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C825	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C826	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C827	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C828	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C829	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C830	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C831	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C832	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C833	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C834	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C835	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C836	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C837	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C838	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C839	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C840	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C841	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C842	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C843	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C844	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C845	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C846	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C847	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C848	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C849	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C850	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C851	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C852	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C853	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C854	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C855	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C856	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C857	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C858	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C859	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C860	RC-KZA101WJZZY	J	10	6.3V	Ceramic	AC
C861	RC-KZA101WJZZY	J	10	6.3V	Ceramic	AC
C862	RC-KZA101WJZZY	J	10	6.3V	Ceramic	AC
C863	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C864	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C865	VCCCCY1HH6R0DY	J	6p	50V	Ceramic	AA
C866	VCCCCY1HH6R0DY	J	6p	50V	Ceramic	AA
C867	RC-KZA101WJZZY	J	10	6.3V	Ceramic	AC
C872	VCAAPE0JJ227MY	J	220	6.3V	Electrolytic	AE
C873	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C874	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C875	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C876	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C877	VCEASX0JN476MY	J	47	6.3V	Electrolytic	AC
C878	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C879	VCCCCY1HH101JY	J	100p (LC-20B9U-S)	50V	Ceramic	AA
C886	VCEASY1CN477MY	J	470	16V	Electrolytic	AD
C887	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C891	VCEASX0JN476MY	J	47	6.3V	Electrolytic	AC
C1101	RC-KZA101WJZZY	J	10	6.3V	Ceramic	AC
C1102	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1103	RC-KZA110WJZZY	J	10	25V	Ceramic	AD
C1104	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1105	RC-KZA111WJZZY	J	1	25V	Ceramic	AC
C1106	RC-KZA111WJZZY	J	1	25V	Ceramic	AC
C1107	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C1108	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C1109	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1132	RC-KZA110WJZZY	J	10	25V	Ceramic	AD
C1201	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1202	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1203	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1204	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1205	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1206	RC-KZA108WJZZY	J	10	10V	Ceramic	AC
C1207	RC-KZA108WJZZY	J	10	10V	Ceramic	AC
C1208	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA

DUNTKD041FE03 (LC-20B9U-S/SM)
DUNTKD041FE06 (LC-20B8U-S)
MAIN Unit (Continued)

Ref. No.	Part No.	★			Description	Code
C1209	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C1210	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1211	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1212	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1213	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1214	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1215	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1216	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1217	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1218	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1219	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1220	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1221	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1222	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1223	RC-KZA108WJZZY	J	10	10V	Ceramic	AC
C1224	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1225	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1226	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1227	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1228	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1229	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1230	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1701	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1703	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1711	RC-KZA108WJZZY	J	10	10V	Ceramic	AC
C1713	RC-KZA110WJZZY	J	10	25V	Ceramic	AD
C1714	VCEASX1HN475MY	J	4.7	50V	Electrolytic	AC
C1715	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C1716	RC-KZA030WJZZY	J	2.2	10V	Ceramic	AB
C1717	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1718	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C1719	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C1720	RC-KZA110WJZZY	J	10	25V	Ceramic	AD
C1723	VCEASX1EN476MY	J	47	25V	Electrolytic	AC
C2001	VCKYTV1CB105KY	J	1	16V	Ceramic	AC
C2002	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C2004	VCEASX0JN226MY	J	22	6.3V	Electrolytic	AB
C2005	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C2006	VCEASX0JN226MY	J	22	6.3V	Electrolytic	AB
C2008	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C2009	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C2010	VCKYCY1HB222KY	J	2200p	50V	Ceramic	AA
C2012	VCKYCY1HB222KY	J	2200p	50V	Ceramic	AA
C2013	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C2014	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C2015	VCKYTV1CF684ZY	J	0.68	16V	Ceramic	AB
C2016	VCCCCY1HH100DY	J	10p	50V	Ceramic	AA
C2017	VCCCCY1HH120JY	J	12p	50V	Ceramic	AA
C2018	RC-KZA101WJZZY	J	10	6.3V	Ceramic	AC
C2019	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C2020	VCKYCY1HB222KY	J	2200p	50V	Ceramic	AA
C2021	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C2022	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8701	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8702	RC-KZA070WJZZY	J	22	6.3V	Ceramic	AD
C8703	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8704	RC-KZA101WJZZY	J	10	6.3V	Ceramic	AC
C8705	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8706	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8707	VCKYCY1CB393KY	J	0.039	16V	Ceramic	AA
C8708	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8709	VCKYCY1HB392KY	J	3900p	50V	Ceramic	AA
C8710	RC-KZA101WJZZY	J	10	6.3V	Ceramic	AC
C8711	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8712	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8713	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8714	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8715	RC-KZA070WJZZY	J	22	6.3V	Ceramic	AD
C8716	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C8717	VCKYCY1CB473KY	J	0.047	16V	Ceramic	AA
C8718	VCKYCY1CB473KY	J	0.047	16V	Ceramic	AA
C8719	VCKYCY1CB473KY	J	0.047	16V	Ceramic	AA
C8720	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8721	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8722	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8723	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8724	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8725	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8726	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8727	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8729	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8730	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8731	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8732	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8733	VCKYCY1CB473KY	J	0.047	16V	Ceramic	AA
C8734	VCKYCY1CB473KY	J	0.047	16V	Ceramic	AA
C8735	VCKYCY1HB102KY	J	1000p	50V	Ceramic (LC-20B8U-S, LC-20B9U-SM)	AA
C8736	VCKYCY1CB473KY	J	0.047	16V	Ceramic	AA
C8737	RC-KZA070WJZZY	J	22	6.3V	Ceramic	AD
C8738	RC-KZA101WJZZY	J	10	6.3V	Ceramic	AC
C8739	VCCCCY1HH101JY	J	100p	50V	Cerammic (LC-20B8U-S, LC-20B9U-SM)	AA

RESISTORS

R401	VRS-TW2HF750JY	J	75	1/2W	Metal Oxide	AA
R402	VRS-TW2HF750JY	J	75	1/2W	Metal Oxide	AA
R403	VRS-TW2HF750JY	J	75	1/2W	Metal Oxide	AA
R404	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R405	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R406	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R407	VRS-CY1JF473JY	J	47k	1/16W	Metal Oxide	AA
R408	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R409	VRS-CH1JF101JY	J	100	1/16W	Metal Oxide	AA
R410	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R411	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R412	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R413	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R414	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R415	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R416	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R417	VRS-CY1JF271JY	J	270	1/16W	Metal Oxide	AA
R418	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R419	VRS-CY1JF271JY	J	270	1/16W	Metal Oxide	AA
R801	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R808	VRS-TV1JD000JY	J	0	1/10W	Metal Oxide	AA
R809	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R810	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R811	VRS-CY1JF105JY	J	1M	1/16W	Metal Oxide	AA
R812	VRS-CH1JF470JY	J	47	1/16W	Metal Oxide	AA
R813	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R814	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R815	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R816	VRS-CY1JF750JY	J	75	1/16W	Metal Oxide	AA
R819	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R823	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R824	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R827	VRS-CY1JF750JY	J	75	1/16W	Metal Oxide	AA
R831	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA
R832	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R833	VRS-CH1JF470JY	J	47	1/16W	Metal Oxide	AA
R834	VRS-CH1JF470JY	J	47	1/16W	Metal Oxide	AA
R835	VRS-CH1JF470JY	J	47	1/16W	Metal Oxide	AA
R836	VRS-CH1JF470JY	J	47	1/16W	Metal Oxide	AA
R837	VRS-CH1JF470JY	J	47	1/16W	Metal Oxide	AA
R838	VRS-CH1JF470JY	J	47	1/16W	Metal Oxide	AA
R839	VRS-CY1JF220JY	J	22	1/16W	Metal Oxide	AA
R840	VRS-CY1JF270JY	J	27	1/16W	Metal Oxide	AA
R841	VRS-CY1JF220JY	J	22	1/16W	Metal Oxide	AA
R842	VRS-CY1JF220JY	J	22	1/16W	Metal Oxide	AA
R843	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R845	VRS-CY1JF220JY	J	22	1/16W	Metal Oxide	AA
R846	VRS-CY1JF220JY	J	22	1/16W	Metal Oxide	AA
R847	VRS-CY1JF220JY	J	22	1/16W	Metal Oxide	AA
R848	VRS-CY1JF220JY	J	22	1/16W	Metal Oxide	AA
R850	VRS-CY1JF102FY	J	1k	1/16W	Metal Oxide	AA

DUNTKD041FE03 (LC-20B9U-S/SM)
DUNTKD041FE06 (LC-20B8U-S)
MAIN Unit (Continued)

Ref. No.	Part No.	★	Description	Code
R851	VRS-CY1JF182FY	J	1.8k 1/16W Metal Oxide	AA
R852	VRS-CY1JF511JY	J	510 1/16W Metal Oxide (LC-20B8U-S,LC-20B9U-SM)	AA
R852	VRS-CY1JF821FY	J	820 1/16W Metal Oxide (LC-20B9U-S)	AA
R855	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R856	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide (LC-20B8U-S,LC-20B9U-SM)	AA
R856	VRS-CY1JF750JY	J	75 1/16W Metal Oxide (LC-20B9U-S)	AA
R857	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide (LC-20B8U-S, LC-20B9U-SM)	AA
R857	VRS-CY1JF750JY	J	75 1/16W Metal Oxide (LC-20B9U-S)	AA
R858	VRS-CY1JF750JY	J	75 1/16W Metal Oxide	AA
R860	VRS-CY1JF220JY	J	22 1/16W Metal Oxide	AA
R861	VRS-CY1JF220JY	J	22 1/16W Metal Oxide	AA
R862	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide (LC-20B8U-S,LC-20B9U-SM)	AA
R863	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide (LC-20B8U-S,LC-20B9U-SM)	AA
R867	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R868	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R869	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R872	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R873	VRS-CH1JF103JY	J	10k 1/16W Metal Oxide	AA
R874	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R876	VRS-CJ1JF100JY	J	10 1/16W Metal Oxide	AA
R878	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R879	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R882	VRS-CY1JF470JY	J	47 1/16W Metal Oxide	AA
R883	VRS-CY1JF470JY	J	47 1/16W Metal Oxide	AA
R884	VCKYCY1HB102KY	J	1000p 50V Ceramic (LC-20B9U-S)	AA
R886	VRS-CY1JF271JY	J	270 1/16W Metal Oxide (LC-20B9U-S)	AA
R893	VRS-TV1JD102JY	J	1k 1/10W Metal Oxide	AA
R894	VRS-CY1JF473JY	J	47k 1/16W Metal Oxide	AA
R895	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R896	VRS-CY1JF473JY	J	47k 1/16W Metal Oxide	AA
R897	VRS-TV1JD000JY	J	0 1/10W Metal Oxide (LC-20B8U-S,LC-20B9U-SM)	AA
R1101	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R1102	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R1103	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
R1104	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
R1105	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R1111	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA
R1112	VRS-TW2ED102JY	J	1k 1/4W Metal Oxide	AA
R1113	VRS-TW2HF5R6JY	J	5.6 1/2W Metal Oxide	AA
R1114	VRS-CY1JF272JY	J	2.7k 1/16W Metal Oxide	AA
R1115	VRS-TQ2BD332JY	J	3.3k 1/8W Metal Oxide	AB
R1116	VRS-TW2ED182JY	J	1.8k 1/4W Metal Oxide	AA
R1117	VRS-CY1JF272JY	J	2.7k 1/16W Metal Oxide	AA
R1118	VRS-TQ2BD332JY	J	3.3k 1/8W Metal Oxide	AB
R1119	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R1120	VRS-CY1JF473JY	J	47k 1/16W Metal Oxide	AA
R1201	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R1202	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R1203	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R1204	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R1209	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R1210	VRS-CY1JF270JY	J	27 1/16W Metal Oxide	AA
R1211	VRS-CY1JF123FY	J	12k 1/16W Metal Oxide	AA
R1213	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
R1215	VRS-CJ1JF270JY	J	27 1/16W Metal Oxide	AA
R1216	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R1218	VRS-TV1JD101JY	J	100 1/10W Metal Oxide	AA
R1219	VRS-CH1JF000JY	J	0 1/16W Metal Oxide	AA
R1220	VRS-CH1JF000JY	J	0 1/16W Metal Oxide	AA
R1221	VRS-CH1JF000JY	J	0 1/16W Metal Oxide	AA
R1222	VRS-CH1JF000JY	J	0 1/16W Metal Oxide	AA
R1223	VRS-CH1JF000JY	J	0 1/16W Metal Oxide	AA
R1224	VRS-CH1JF000JY	J	0 1/16W Metal Oxide	AA
R1702	VRS-CY1JF272JY	J	2.7k 1/16W Metal Oxide	AA
R1703	VRS-CY1JF333FY	J	33k 1/16W Metal Oxide	AA
R1704	VRS-TW2ED123JY	J	12k 1/4W Metal Oxide (LC-20B9U-S)	AA
R1704	VRS-TW2HF333JY	J	33k 1/2W Metal Oxide (LC-20B8U-S,LC-20B9U-SM)	AA
R1706	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R1707	VRS-CY1JF473FY	J	47k 1/16W Metal Oxide	AA
R1708	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R1709	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R1711	VRS-TW2HF330JY	J	33 1/2W Metal Oxide	AA
R1713	VRS-TV1JD562JY	J	5.6k 1/10W Metal Oxide	AA
R1714	VRS-TW2HF333JY	J	33k 1/2W Metal Oxide (LC-20B8U-S,LC-20B9U-SM)	AA
R1714	VRS-TW2HF472JY	J	4.7k 1/2W Metal Oxide (LC-20B9U-S)	AA
R1715	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R1717	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R1718	VRS-CY1JF102FY	J	1k 1/16W Metal Oxide	AA
R1719	VRS-CY1JF182FY	J	1.8k 1/16W Metal Oxide	AA
R1721	VRS-CY1JF182FY	J	1.8k 1/16W Metal Oxide	AA
R1722	VRS-CY1JF182FY	J	1.8k 1/16W Metal Oxide	AA
R1723	VRS-CY1JF273FY	J	27k 1/16W Metal Oxide	AA
R1724	VRS-CY1JF273FY	J	27k 1/16W Metal Oxide	AA
R1729	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R1739	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R1740	VRS-CY1JF182FY	J	1.8k 1/16W Metal Oxide	AA
R1741	VRS-CY1JF822FY	J	8.2k 1/16W Metal Oxide	AA
R1742	VRS-CY1JF564FY	J	560k 1/16W Metal Oxide	AA
R1746	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA
R1747	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R1750	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R1752	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R1758	VRS-TW2HF333JY	J	33k 1/2W Metal Oxide (LC-20B8U-S,LC-20B9U-SM)	AA
R1758	VRS-TW2HF472JY	J	4.7k 1/2W Metal Oxide (LC-20B9U-S)	AA
R1759	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA
R1762	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA
R1763	VRS-TW2HF472JY	J	4.7k 1/2W Metal Oxide	AA
R2001	VRS-CY1JF393FY	J	39k 1/16W Metal Oxide	AA
R2002	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2003	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R2005	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R2006	VRS-CY1JF1R0JY	J	1 1/16W Metal Oxide	AA
R2007	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R2008	VRS-CY1JF102FY	J	1k 1/16W Metal Oxide	AA
R2009	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R2010	VRS-CY1JF623FY	J	62k 1/16W Metal Oxide	AA
R2011	VRS-CY1JF433FY	J	43k 1/16W Metal Oxide	AA
R2012	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R2013	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2015	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2016	VRS-CY1JF473FY	J	47k 1/16W Metal Oxide	AA
R2017	VRS-CJ1JF223JY	J	22k 1/16W Metal Oxide	AA
R2018	VRS-CJ1JF102JY	J	1k 1/16W Metal Oxide	AA
R2019	VRS-CY1JF823FY	J	82k 1/16W Metal Oxide	AA
R2020	VRS-CY1JF124FY	J	120k 1/16W Metal Oxide	AA
R2021	VRS-CY1JF274JY	J	270k 1/16W Metal Oxide	AA
R2023	VRS-CY1JF184JY	J	180k 1/16W Metal Oxide	AA
R2024	VRS-CY1JF823JY	J	82k 1/16W Metal Oxide	AA
R2027	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R2028	VRS-CY1JF124FY	J	120k 1/16W Metal Oxide	AA
R2029	VRS-CY1JF473JY	J	47k 1/16W Metal Oxide	AA
R2030	VRS-CJ1JF223JY	J	22k 1/16W Metal Oxide	AA
R2032	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R2033	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2034	VRS-CY1JF153JY	J	15k 1/16W Metal Oxide	AA
R2035	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R2036	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2037	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA

DUNTKD041FE03 (LC-20B9U-S/SM)
DUNTKD041FE06 (LC-20B8U-S)
MAIN Unit (Continued)

Ref. No.	Part No.	★	Description	Code
R2038	VRS-CH1JF101JY	J	100 1/16W Metal Oxide	AA
R2039	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R2040	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2041	VRS-CY1JF512JY	J	5.1k 1/16W Metal Oxide	AA
R2043	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA
R2044	VRS-CJ1JF101JY	J	100 1/16W Metal Oxide	AA
R2045	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R2046	VRS-CY1JF680JY	J	68 1/16W Metal Oxide	AA
R2047	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R2048	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2050	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2051	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2052	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2053	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2054	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2055	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2056	VRS-CJ1JF101JY	J	100 1/16W Metal Oxide	AA
R2058	VRS-CJ1JF682JY	J	6.8k 1/16W Metal Oxide	AA
R2059	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R2060	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2063	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2064	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2065	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2066	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2068	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2069	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R2070	VRS-CJ1JF101JY	J	100 1/16W Metal Oxide	AA
R2071	VRS-CJ1JF153JY	J	15k 1/16W Metal Oxide	AA
R2072	VRS-CH1JF680JY	J	68 1/16W Metal Oxide	AA
R2073	VRS-CH1JF101JY	J	100 1/16W Metal Oxide	AA
R2074	VRS-CJ1JF101JY	J	100 1/16W Metal Oxide	AA
R2081	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2082	VRS-CJ1JF101JY	J	100 1/16W Metal Oxide	AA
R2084	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R2085	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R2086	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R2088	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2089	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R2090	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R2091	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R2092	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R2098	VRS-CJ1JF000JY	J	0 1/16W Metal Oxide	AA
R2099	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide (LC-20B9U-S)	AA
R2105	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R2106	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R2108	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R8701	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R8702	VRS-TQ2BD332JY	J	3.3k 1/8W Metal Oxide	AB
R8703	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R8704	VRS-CY1JF151JY	J	150 1/16W Metal Oxide	AA
R8705	VRS-CY1JF151JY	J	150 1/16W Metal Oxide	AA
R8706	VRS-CJ1JF101JY	J	100 1/16W Metal Oxide	AA
R8707	VRS-CY1JF220JY	J	22 1/16W Metal Oxide	AA
R8715	VRS-CJ1JF220JY	J	22 1/16W Metal Oxide	AA
R8718	VRS-CH1JF330JY	J	33 1/16W Metal Oxide	AA
R8719	VRS-CH1JF330JY	J	33 1/16W Metal Oxide	AA
R8720	VRS-CH1JF330JY	J	33 1/16W Metal Oxide	AA
R8721	VRS-CH1JF330JY	J	33 1/16W Metal Oxide	AA
R8722	VRS-CH1JF330JY	J	33 1/16W Metal Oxide	AA
R8723	VRS-CH1JF330JY	J	33 1/16W Metal Oxide	AA
R8724	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA
R8725	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R8727	VRS-CY1JF271JY	J	270 1/16W Metal Oxide (LC-20B8U-S,LC-20B9U-SM)	AA

MISCELLANEOUS PARTS

FB401	RBLN-0060TAZZY	J	Ferrite Bead	AB
FB402	RBLN-0060TAZZY	J	Ferrite Bead	AB
FB403	RBLN-0060TAZZY	J	Ferrite Bead	AB
FB404	RBLN-0060TAZZY	J	Ferrite Bead	AB
FB803	RBLN-0006TAZZY	J	Ferrite Bead	AB
FB805	RBLN-0006TAZZY	J	Ferrite Bead	AB
FB806	RBLN-0006TAZZY	J	Ferrite Bead	AB
FB807	RBLN-0210TAZZY	J	Ferrite Bead	AB
FB1201	RBLN-0006TAZZY	J	Ferrite Bead	AB
FB1202	RBLN-0006TAZZY	J	Ferrite Bead	AB
FB1203	RBLN-0006TAZZY	J	Ferrite Bead	AB
FB8701	RBLN-0050TAZZY	J	Ferrite Bead	AA
FB8702	RBLN-0050TAZZY	J	Ferrite Bead	AA
FB8703	RBLN-0050TAZZY	J	Ferrite Bead	AA
FB8704	RBLN-0067TAZZY	J	Ferrite Bead	AC
P2002	QPLGNA144WJZZY	J	Plug, 20-pin	AF
SC401	QSOCNA101WJZZ	J	ANALOG RGB(INPUT5)	AF
SC1201	QSOCNA222WJZZY	J	Socket, 80-pin	AH
SC2001	QCNCWA251WJZZYJ		Connector, 23-pin	AH
SC2003	QCNCWA010WJZZYJ		Connector, 15-pin	AE
SC2004	QCNCWA251WJZZYJ		Connector, 23-pin	AH
LUG2001	QLUGHA006WJZZY	J	Lug	AC
LUG2002	QLUGHA006WJZZY	J	Lug	AC
LUG2003	QLUGHA006WJZZY	J	Lug	AC
LUG2004	QLUGHA006WJZZY	J	Lug	AC

Ref. No.	Part No.	★	Description	Code

DUNTKD042DE03 (LC-20B9U-S)
DUNTKD042WE03 (LC-20B9U-SM)
DUNTKD042WE06 (LC-20B8U-S)
SUB Unit

TUNER
NOTE: THE PARTS HERES SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.

TU3401	VTUVT2U5UF559	J	Tuner	BB

INTEGRATED CIRCUITS

IC3201	RH-iX3370CEN2Q	J	MSP3440G-QA-C1	AX
IC3206	VHiLA4635A+-1S	J	LA4635A	AM
IC3305	VHiBH3544F+-1Y	J	BH3544F-E2	AE
IC3401	VHiCXA2089Q-1S	J	CXA2089Q(LC-20B9U-S)	AN
IC3401	VHiCXA2089Q-2Y	X	CXA2089Q-6T (LC-20B8U-S,LC-20B9U-SM)	AM
IC3403	VHiSM5301AS-1Y	J	SM5301AS-G-ET	AR
IC3404	VHiTC4053BF1EY	J	TC4053BF	AF

TRANSISTORS

Q3203	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q3204	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q3205	VSDTC314TK/-1Y	J	DTC314TK	AC
Q3206	VSDTC314TK/-1Y	J	DTC314TK	AC
Q3208	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q3305	VSDTC144EE/-1Y	J	DTC144EE	AA
Q3401	VSDTC314TK/-1Y	J	DTC314TK	AC
Q3402	VSDTC314TK/-1Y	J	DTC314TK	AC
Q3403	VSDTA144EE/-1Y	J	DTA144EE	AA
Q3404	VS2SA1037KQ-1Y	J	2SA1037KQ	AA
Q3406	VS2SA1037KQ-1Y	J	2SA1037KQ	AA
Q3410	VSDTC314TK/-1Y	J	DTC314TK	AC
Q3413	VSUMG4N++++-1Y	J	UMG4N	AB
Q3414	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q3416	VSUPA606T//-1Y	J	UPA606T	AD
Q3419	VSiMZ1A////-1Y	J	IMZ1A	AC

DIODES

D3206	RH-EX1271CEZZY	J	Zener Diode, 12V	AB
D3208	RH-EX1271CEZZY	J	Zener Diode, 12V	AB
D3210	VHDDAN202K/-1Y	J	Diode	AB
D3211	RH-EX1397CEZZY	J	Zener Diode, 7.5V	AB
D3407	VHDDAN222//-1Y	J	Diode	AA

PACKAGED CIRCUITS

X3201	RCRSB0250GEZZ	J	Crystal, 18.432MHz	AG

COILS

L3201	VPCNN101J7R7NY	J	Peaking 100µH	AB
L3202	VPCNN220J2R9NY	J	Peaking 22µH	AB
L3203	VPCNN4R7J1R2NY	J	Peaking 4.7µH	AB
L3303	VPCNN101J7R7NY	J	Peaking 100µH	AB
L3401	VP-9N4R7KR56NY	J	Peaking 4.7µH	AC
L3405	RCiLPA142WJZZ	J	Coil	AD

CAPACITORS

C3202	VCEASX0JN107MY	J	100	6.3V	Electrolytic	AC
C3203	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C3204	VCCCCY1HH330JY	J	33p	50V	Ceramic	AA
C3207	VCCCCY1HH330JY	J	33p	50V	Ceramic	AA
C3208	VCCCCY1HH560JY	J	56p	50V	Ceramic	AB
C3209	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3212	VCCCCY1HH5R0CY	J	5p	50V	Ceramic	AA
C3213	VCCCCY1HH5R0CY	J	5p	50V	Ceramic	AA
C3216	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C3218	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3219	VCCCCY1HH560JY	J	56p	50V	Ceramic	AB
C3220	VCCCCY1HH560JY	J	56p	50V	Ceramic	AB
C3222	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3226	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3230	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3232	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3235	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3236	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3237	VCEASX0JN107MY	J	100	6.3V	Electrolytic	AC
C3243	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3244	VCEASX1HN335MY	J	3.3	50V	Electrolytic	AB
C3245	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C3251	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3252	VCEASX1CN107MY	J	100	16V	Electrolytic	AC
C3253	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C3254	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C3261	VCKYCY1EB223KY	J	0.022	25V	Ceramic	AA
C3262	VCKYCY1EB223KY	J	0.022	25V	Ceramic	AA
C3265	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3266	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3268	VCEASX1CN107MY	J	100	16V	Electrolytic	AC
C3270	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C3271	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C3272	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C3273	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C3274	VCKYTV1CB105KY	J	1	16V	Ceramic	AC
C3275	RC-EZA216WJZZ	J	1000	16V	Electrolytic	AD
C3276	RC-EZA216WJZZ	J	1000	16V	Electrolytic	AD
C3277	RC-EZA216WJZZ	J	1000	16V	Electrolytic	AD
C3301	RC-KZA030WJZZY	J	2.2	10V	Ceramic	AB
C3308	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C3309	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C3343	VCEASX0JN227MY	J	220	6.3V	Electrolytic	AC
C3345	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3346	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3347	VCEASX1AN336MY	J	33	10V	Electrolytic	AC
C3348	VCEASX0JN227MY	J	220	6.3V	Electrolytic	AC
C3349	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3350	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C3364	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C3365	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C3366	RC-KZA030WJZZY	J	2.2	10V	Ceramic	AB
C3368	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3369	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C3402	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3404	VCESYA0JM338M	J	3300	6.3V	Electrolytic	AD
C3405	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3406	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3407	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3408	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3409	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3410	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3413	RC-KZA030WJZZY	J	2.2	10V	Ceramic	AB
C3414	RC-KZA030WJZZY	J	2.2	10V	Ceramic	AB
C3417	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3418	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3419	VCCCCY1HH221JY	J	220p	50V	Ceramic	AA
C3420	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3421	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3422	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3423	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3424	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C3425	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3426	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3428	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3429	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C3430	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3431	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3432	VCEASX1CN107MY	J	100	16V	Electrolytic	AC
C3433	RC-KZA108WJZZY	J	10	10V	Ceramic	AC
C3434	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3435	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3436	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3437	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3438	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3439	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3440	VCKYCY1CB104KY	J	0.1	16V	Ceramic	AB
C3441	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3443	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3444	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3446	VCEASX0JN107MY	J	100	6.3V	Electrolytic	AC
C3447	RC-KZA116WJZZY	J	4.7	6.3V	Ceramic	AC

DUNTKD042DE03 (LC-20B9U-S)
DUNTKD042WE03 (LC-20B9U-SM)
DUNTKD042WE06 (LC-20B8U-S)
SUB Unit (Continued)

Ref. No.	Part No.	★			Description	Code
C3449	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3450	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C3458	RC-KZA101WJZZY	J	10	6.3V	Ceramic	AC
C3459	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3462	RC-KZA101WJZZY	J	10	6.3V	Ceramic	AC
C3464	RC-KZA101WJZZY	J	10	6.3V	Ceramic	AC
C3465	VCEASY1CN477MY	J	470	16V	Electrolytic	AD
C3467	VCAAPC0JJ226MY	J	22	6.3V	Electrolytic	AE
C3469	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3470	VCEASX1HN105MY	J	1	50V	Electrolytic	AB
C3471	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3472	VCKYCY1HF103ZY	J	0.01	50V	Ceramic	AA

RESISTORS

R3201	VRS-CJ1JF101JY	J	100	1/16W	Metal Oxide	AA
R3206	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R3209	VRS-CY1JF153JY	J	15k	1/16W	Metal Oxide	AA
R3210	VRS-CY1JF332JY	J	3.3k	1/16W	Metal Oxide	AA
R3211	VRS-CY1JF105JY	J	1M	1/16W	Metal Oxide	AA
R3214	VRS-CY1JF152JY	J	1.5k	1/16W	Metal Oxide	AA
R3215	VRS-CY1JF331JY	J	330	1/16W	Metal Oxide	AA
R3221	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R3248	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3250	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3252	VRS-CY1JF472JY	J	4.7k	1/16W	Metal Oxide	AA
R3254	VRS-CY1JF472JY	J	4.7k	1/16W	Metal Oxide	AA
R3255	VRS-CY1JF272JY	J	2.7k	1/16W	Metal Oxide	AA
R3256	VRS-CY1JF272JY	J	2.7k	1/16W	Metal Oxide	AA
R3258	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3260	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3262	VRS-CY1JF122JY	J	1.2k	1/16W	Metal Oxide	AA
R3263	VRS-CY1JF183JY	J	18k	1/16W	Metal Oxide	AA
R3264	VRS-CY1JF822JY	J	8.2k	1/16W	Metal Oxide	AA
R3265	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R3267	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3339	VRS-TQ2BD330JY	J	33	1/8W	Metal Oxide	AA
R3340	VRS-CY1JF392JY	J	3.9k	1/16W	Metal Oxide	AA
R3344	VRS-CY1JF471JY	J	470	1/16W	Metal Oxide	AA
R3345	VRS-TQ2BD330JY	J	33	1/8W	Metal Oxide	AA
R3346	VRS-CY1JF392JY	J	3.9k	1/16W	Metal Oxide	AA
R3357	VRS-CY1JF471JY	J	470	1/16W	Metal Oxide	AA
R3360	VRS-TQ2BD470JY	J	47	1/8W	Metal Oxide	AA
R3361	VRS-TQ2BD470JY	J	47	1/8W	Metal Oxide	AA
R3376	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R3377	VRS-CY1JF123JY	J	12k	1/16W	Metal Oxide	AA
R3401	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R3402	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R3403	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R3404	VRS-CY1JF222JY	J	2.2k	1/16W	Metal Oxide	AA
R3405	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3406	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3407	VRS-TQ2BD750JY	J	75	1/8W	Metal Oxide	AA
R3408	VRS-TQ2BD750JY	J	75	1/8W	Metal Oxide	AA
R3409	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R3410	VRS-TQ2BD750JY	J	75	1/8W	Metal Oxide	AA
R3411	VRS-CY1JF152JY	J	1.5k	1/16W	Metal Oxide	AA
R3412	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R3413	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R3414	VRS-TQ2BD750JY	J	75	1/8W	Metal Oxide	AA
R3415	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3416	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3417	VRS-TQ2BD750JY	J	75	1/8W	Metal Oxide	AA
R3418	VRS-CY1JF222JY	J	2.2k	1/16W	Metal Oxide	AA
R3419	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R3420	VRS-TQ2BD750JY	J	75	1/8W	Metal Oxide	AA
R3421	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3422	VRS-TQ2BD750JY	J	75	1/8W	Metal Oxide	AA
R3423	VRS-CY1JF471JY	J	470	1/16W	Metal Oxide	AA
R3424	VRS-CY1JF471JY	J	470	1/16W	Metal Oxide	AA
R3425	VRS-TQ2BD750JY	J	75	1/8W	Metal Oxide	AA
R3426	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R3427	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3428	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3429	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R3430	VRS-TQ2BD750JY	J	75	1/8W	Metal Oxide	AA
R3431	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3432	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R3433	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3434	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3435	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3436	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3437	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3440	VRS-CY1JF562JY	J	5.6k	1/16W	Metal Oxide	AA
R3441	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3443	VRS-CY1JF562JY	J	5.6k	1/16W	Metal Oxide	AA
R3444	VRS-CY1JF153JY	J	15k	1/16W	Metal Oxide	AA
R3448	VRS-CJ1JF331JY	J	330	1/16W	Metal Oxide	AA
R3452	VRS-CY1JF562JY	J	5.6k	1/16W	Metal Oxide	AA
R3453	VRS-CY1JF562JY	J	5.6k	1/16W	Metal Oxide	AA
R3454	VRS-CY1JF562JY	J	5.6k	1/16W	Metal Oxide	AA
R3455	VRS-CY1JF562JY	J	5.6k	1/16W	Metal Oxide	AA
R3462	VRS-TQ2BD471JY	J	470	1/8W	Metal Oxide	AA
R3463	VRS-CY1JF562JY	J	5.6k	1/16W	Metal Oxide	AA
R3464	VRS-CY1JF562JY	J	5.6k	1/16W	Metal Oxide	AA
R3465	VRS-CY1JF122FY	J	1.2k	1/16W	Metal Oxide	AA
R3466	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R3467	VRS-TQ2BD471JY	J	470	1/8W	Metal Oxide	AA
R3468	VRS-CY1JF472JY	J	4.7k	1/16W	Metal Oxide	AA
R3469	VRS-CY1JF472JY	J	4.7k	1/16W	Metal Oxide	AA
R3470	VRS-CY1JF222JY	J	2.2k	1/16W	Metal Oxide	AA
R3471	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R3472	VRS-CY1JF562JY	J	5.6k	1/16W	Metal Oxide	AA
R3473	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R3474	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3475	VRS-CY1JF472JY	J	4.7k	1/16W	Metal Oxide	AA
R3476	VRS-CY1JF472JY	J	4.7k	1/16W	Metal Oxide	AA
R3477	VRS-CY1JF222JY	J	2.2k	1/16W	Metal Oxide	AA
R3478	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3479	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3480	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3481	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3482	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R3483	VRS-CY1JF152JY	J	1.5k	1/16W	Metal Oxide	AA
R3484	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3485	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3487	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3488	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3489	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3490	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3491	VRS-TQ2BD750JY	J	75	1/8W	Metal Oxide	AA
R3492	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3493	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3494	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3495	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3496	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3497	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3498	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3499	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3501	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R3503	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R3504	VRS-CY1JF100JY	J	10	1/16W	Metal Oxide	AA
R3509	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3513	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3516	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3518	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3519	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R3520	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3521	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3523	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3524	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3529	VRS-CY1JF152JY	J	1.5k	1/16W	Metal Oxide	AA
R3530	VRS-CY1JF561FY	J	560	1/16W	Metal Oxide	AA
R3532	VRS-CY1JF102FY	J	1k	1/16W	Metal Oxide	AA
R3533	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3534	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3535	VRS-CJ1JF101JY	J	100	1/16W	Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code

DUNTKD042DE03 (LC-20B9U-S)
DUNTKD042WE03 (LC-20B9U-SM)
DUNTKD042WE06 (LC-20B8U-S)
SUB Unit (Continued)

R3540	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3545	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3550	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA

MISCELLANEOUS PARTS

FB3201	RBLN-0035TAZZY	J	Ferrite Bead	AB
J3401	QSOCDA028WJZZ	J	S-VIDEO(INPUT3)	AC
J3403	QJAKLA015WJZZ	J	VIDEO/AUDIO(L/R) (INPUT3/4)	AE
J3405	QJAKHA015WJZZ	J	AUDIO(L/R)(INPUT1/2)	AE
J3409	QJAKJ0047CEZZ	J	AUDIO(INPUT5)	AD
J3410	QJAKLA014WJZZ	J	Y/PB/PR(INPUT1/2)	AE
P3401	QCNCMA250WJZZ	J	Connector, 23-pin	AE
SC3402	QSOCZ1938CEZZ	J	Socket, 19-pin	AF
LUG3431	QLUGHA006WJZZY	J	Lug	AC
LUG3432	QLUGHA006WJZZY	J	Lug	AC
LUG3433	QLUGHA006WJZZY	J	Lug	AC
LUG3434	QLUGHA006WJZZY	J	Lug	AC

Ref. No.	Part No.	★	Description	Code

DUNTKD043FE03 (LC-20B9U-S)
DUNTKD043FM03 (LC-20B9U-SM)
DUNTKD043FM06 (LC-20B8U-S)
POWER Unit

INTEGRATED CIRCUITS

	IC7001	VHiBD9300F+-1Y	J	BD9300F-FE2	AG
	IC7002	VHiBD9300F+-1Y	J	BD9300F-FE2	AG
	IC7004	VHiSi3012LU-1Y	J	SI-3012LU	AE
	IC7301	VHiBD9300F+-1Y	J	B9300F-FE2	AG
	IC7701	VHiSTRX6768-1	J	STR-X6768NLF	AQ
⚠	IC7702	RH-FXA003WJZZ	J	PC123Y82	AD
⚠	IC7703	RH-FXA003WJZZ	J	PC123Y82	AD
	IC7704	VHiSE012N//-1	J	SE012N	AH

TRANSISTORS

	Q7001	VSRSS070N05-1Y	J	RSS070N05	AF
	Q7002	VS2SC2412KQ-1Y	J	2SC2412KQ	AA
	Q7003	VS2SC2412KQ-1Y	J	2SC2412KQ	AA
	Q7004	VS2SA1037KQ-1Y	J	2SA1037KQ	AA
	Q7005	VSRTQ035P02-1Y	J	RTQ035P02	AD
	Q7006	VSRHP020N06-1Y	J	RHP020N06	AD
	Q7010	VSKRC104S//-1Y	J	KRC104S(LC-20B9U-S)	AA
	Q7301	VS2SA1037KQ-1Y	J	2SA1037KQ	AA
	Q7302	VS2SC2412KQ-1Y	J	2SC2412KQ	AA
	Q7304	VS2SA1530AR-1Y	J	2SA1530AR(LC-20B9U-S)	AB
	Q7701	VS2SA1013//1E+	J	2SA1013	AD
	Q7751	VSKRC104S//-1Y	J	KRC104S	AA
	Q7752	VSKRC102S//-1Y	J	KRC102S	AA

DIODES

	D4201	RH-EX0652GEZZY	J	Zener Diode, 18V	AB
	D4202	RH-EX0640GEZZY	J	Zener Diode, 12V	AA
	D4203	RH-EX0640GEZZY	J	Zener Diode, 12V	AA
	D7001	VHDLi116+++-1Y	J	Diode	AC
	D7002	VHD1SS250//1EY	J	Diode	AB
	D7003	VHDLi124+++-1Y	J	Diode	AC
	D7004	RH-DX0473CEZZ	J	Diode	AK
	D7005	VHDDAN202K/-1Y	J	Diode	AB
	D7006	VHDRB051L40-1Y	J	Diode	AD
	D7007	VHDRB051L40-1Y	J	Diode	AD
	D7010	VHDRB491D++-1Y	J	Diode	AD
	D7012	RH-EX0675GEZZY	J	Zener Diode, 33V	AB
	D7304	VHDBAS316//-1Y	J	Diode(LC-20B9U-S)	AB
	D7306	VHDBAS316//-1Y	J	Diode	AB
	D7307	VHDBAS316//-1Y	J	Diode	AB
	D7308	VHDBAS316//-1Y	J	Diode	AB
	D7309	VHDBAS316//-1Y	J	Diode	AB
	D7310	VHDBAS316//-1Y	J	Diode	AB
⚠	D7701	RH-DXA068WJZZS	J	Diode	AE
	D7702	RH-DX0321CEZZY	J	Diode	AC
	D7703	RH-DX0490CEZZY	J	Diode	AC
	D7704	RH-DX0490CEZZY	J	Diode	AC
	D7711	RH-DX0066GEZZY	J	Diode	AC
	D7712	VHD1SS244//-1Y	J	Diode	AB
	D7713	RH-EX0640GEZZY	J	Zener Diode, 12V	AA
	D7714	VHD1SS244//-1Y	J	Diode	AB
	D7715	RH-EX0618GEZZY	J	Zener Diode, 6.2V	AB
	D7716	VHD1SS244//-1Y	J	Diode	AB
	D7717	VHD1SS244//-1Y	J	Diode	AB
	D7718	RH-EX0656GEZZY	J	Zener Diode, 20V	AB
	D7732	VHDSF30SC6+-1	J	Diode	AH
	D7733	VHDSF30SC6+-1	J	Diode	AH
	D7734	RH-EX0640GEZZY	J	Zener Diode, 12V	AA
	D7736	RH-EX0652GEZZY	J	Zener Diode, 18V	AB
⚠	TH7701	RH-HXA019WJZZ	J	Thermistor	AE
⚠	VA7701	RH-VXA022WJZZ	J	Varistor	AD
⚠	VA7702	RH-VXA018WJN1	J	Varistor	AD

COILS

L7001	RCiLPA026WJZZ	J	Coil	AD
L7002	RCiLPA315WJZZ	J	Coil	AE
L7003	RCiLPA314WJZZ	J	Coil	AE
L7004	RCiLP0173CEZZ+	J	Coil	AC
L7005	RCiLP0173CEZZ+	J	Coil	AC
L7006	RCiLP0175CEZZ+	J	Coil	AD

DUNTKD043FE03 (LC-20B9U-S)
DUNTKD043FM03 (LC-20B9U-SM)
DUNTKD043FM06 (LC-20B8U-S)
POWER Unit (Continued)

Ref. No.	Part No.	★	Description	Code
⚠ L7701	RCiLFA145WJZZ	J	Coil	AG
⚠ L7702	RCiLFA145WJZZ	J	Coil	AG
L7733	RCiLP0171CEZZ+	J	Coil	AD

TRANSFORMER

Ref. No.	Part No.	★	Description	Code
T7001	RTRNWA169WJZZ	J	Transformer	AG
⚠ T7701	RTRNWA184WJZZ	J	Transformer	AN

CAPACITORS

Ref. No.	Part No.	★	Description	Code
C7001	RC-KZA124WJZZY	J	0.022 50V Ceramic	AD
C7002	VCKYCY1HB562KY	J	5600p 50V Ceramic	AA
C7003	RC-EZA464WJZZ	J	1000 16V Electrolytic (LC-20B9U-S)	AD
C7003	RC-EZA464WJZZ+	J	1000 16V Electrolytic (LC-20B8U-S,LC-20B9U-SM)	AD
C7004	VCKYCY1HB562KY	J	5600p 50V Ceramic	AA
C7005	VCCCCY1HH181JY	J	180p 50V Ceramic	AA
C7006	RC-EZA184WJZZ+	J	100 50V Electrolytic	AD
C7007	VCKYCY1HF104ZY	J	0.1 50V Ceramic	AA
C7008	RC-EZA159WJZZ+	J	330 16V Electrolytic	AC
C7009	VCKYTV1CB105KY	J	1 16V Ceramic	AC
C7010	RC-EZA450WJZZ	J	1500 10V Electrolytic (LC-20B9U-S)	AD
C7010	RC-EZA450WJZZ+	J	1500 10V Electrolytic (LC-20B8U-S,LC-20B9U-SM)	AD
C7011	VCKYTV1CB105KY	J	1 16V Ceramic	AC
C7012	RC-EZA159WJZZ+	J	330 16V Electrolytic	AC
C7013	VCKYTV1CB105KY	J	1 16V Ceramic	AC
C7014	VCESYA1CM107M+	J	100 16V Electrolytic	AB
C7015	VCKYTV1CB105KY	J	1 16V Ceramic	AC
C7016	VCKYTV1CB105KY	J	1 16V Ceramic	AC
C7017	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C7018	VCCCCY1HH102JY	J	1000p 50V Ceramic	AB
C7020	VCCCCY1HH102JY	J	1000p 50V Ceramic	AB
C7022	VCCCCY1HH330JY	J	33p 50V Ceramic	AA
C7024	VCCCCY1HH101JY	J	100p 50V Ceramic	AA
C7027	VCKYCY1AB224KY	J	0.22 10V Ceramic	AB
C7028	RC-KZA109WJZZY	J	10 16V Ceramic	AC
C7029	VCKYCY1AB224KY	J	0.22 10V Ceramic	AB
C7030	RC-KZA109WJZZY	J	10 16V Ceramic	AC
C7031	VCKYCY1EB223KY	J	0.022 25V Ceramic	AA
C7032	VCCCCY1HH102JY	J	1000p 50V Ceramic	AB
C7033	RC-KZA101WJZZY	J	10 6.3V Ceramic	AC
C7034	RC-KZA110WJZZY	J	10 25V Ceramic	AD
C7035	RC-KZA101WJZZY	J	10 6.3V Ceramic	AC
C7040	VCESYA1CM476M+	J	47 16V Electrolytic	AB
C7043	RC-KZA111WJZZY	J	1 25V Ceramic	AC
C7044	RC-EZA559WJZZ	J	0.33F 5.5V Electrolytic	AF
C7047	VCCCCY1HH181JY	J	180p 50V Ceramic	AA
C7301	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C7302	VCKYTV1CB105KY	J	1 16V Ceramic	AC
C7303	VCKYCY1HB332KY	J	3300p 50V Ceramic	AA
C7304	VCCCCY1HH330JY	J	33p 50V Ceramic	AA
C7305	VCCCCY1HH330JY	J	33p 50V Ceramic	AA
C7306	VCCCCY1HH471JY	J	470p 50V Ceramic	AA
C7307	VCESYA1CM107M+	J	100 16V Electrolytic	AB
C7308	VCKYCY1HB103KY	J	0.01 50V Ceramic	AA
C7309	VCKYCY1AB224KY	J	0.22 10V Ceramic	AB
C7310	VCCCCY1HH102JY	J	1000p 50V Ceramic	AB
⚠ C7701	RC-FZA022WJZZ	J	0.22 275V Film	AD
⚠ C7702	RC-FZA022WJZZ	J	0.22 275V Film	AD
⚠ C7703	RC-EZA733WJQZ	J	220 420V Electrolytic	AR
C7704	RC-FZA180WJZZ	J	0.1 580V Film	AD
C7707	RC-EZA162WJZZ+	J	1000 16V Film	AD
⚠ C7710	RC-KZ0103GEZZ	J	1000p 250V Ceramic	AD
C7711	RC-KZA271WJZZ	J	470p 2kV Ceramic	AC
C7712	VCESYA1HM225M+	J	2.2 50V Electrolytic	AB
C7713	VCKYPA1HB471K+	J	470p 50V Ceramic	AA
C7714	VCQYTA1HM104J+	J	0.1 50V Mylar	AB
C7715	VCESYA1HM106M+	J	10 50V Electrolytic	AB
C7716	VCESYA1VM476M+	J	47 35V Electrolytic	AB
C7717	VCQYTA1HM332J+	J	3300p 50V Mylar	AA
⚠ C7721	RC-KZ0103GEZZ	J	1000p 250V Ceramic	AD
⚠ C7722	RC-KZ0105GEZZ	J	2200p 250V Ceramic	AD
C7735	RC-EZA468WJZZ	J	2200 16V Electrolytic (LC-20B9U-S)	AE
C7735	RC-EZA468WJZZ+	J	2200 16V Electrolytic (LC-20B8U-S,LC-20B9U-SM)	AE
C7737	RC-EZA468WJZZ	J	2200 16V Electrolytic (LC-20B9U-S)	AE
C7737	RC-EZA468WJZZ+	J	2200 16V Electrolytic (LC-20B8U-S,LC-20B9U-SM)	AE
C7738	RC-EZA162WJZZ+	J	1000 16V Electrolytic	AD
C7759	RC-EZA468WJZZ	J	2200 16V Electrolytic (LC-20B9U-S)	AE
C7759	RC-EZA468WJZZ+	J	2200 16V Electrolytic (LC-20B8U-S,LC-20B9U-SM)	AE
C7760	VCKYTV1CB105KY	J	1 16V Ceramic	AC
C7761	VCKYTV1CB105KY	J	1 16V Ceramic	AC

RESISTORS

Ref. No.	Part No.	★	Description	Code
R4201	VRS-CY1JF682JY	J	6.8k 1/16W Metal Oxide	AA
R4202	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA
R4203	VRS-CY1JF682JY	J	6.8k 1/16W Metal Oxide	AA
R4204	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA
R7001	VRD-RA2HD471JY	J	470 1/2W Carbon (LC-20B9U-S)	AA
R7001	VRD-RM2HD471JY	J	470 1/2W Carbon (LC-20B8U-S,LC-20B9U-SM)	AA
R7003	VRD-RA2HD471JY	J	470 1/2W Carbon (LC-20B9U-S)	AA
R7003	VRD-RM2HD471JY	J	470 1/2W Carbon (LC-20B8U-S,LC-20B9U-SM)	AA
R7005	VRS-CY1JF1R0JY	J	1 1/16W Metal Oxide	AA
R7006	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R7007	VRS-TQ2BD683JY	J	68k 1/8W Metal Oxide	AA
R7009	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R7010	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R7012	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
R7013	VRS-CY1JF104DY	J	100k 1/16W Metal Oxide	AA
R7014	VRS-CY1JF104DY	J	100k 1/16W Metal Oxide	AA
R7015	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
R7016	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R7017	VRS-CY1JF104DY	J	100k 1/16W Metal Oxide	AA
R7018	VRS-CY1JF104DY	J	100k 1/16W Metal Oxide	AA
R7019	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R7020	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R7021	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R7022	VRS-CY1JF183FY	J	18k 1/16W Metal Oxide	AA
R7024	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R7025	VRS-CY1JF203FY	J	20k 1/16W Metal Oxide	AA
R7026	VRS-CY1JF224FY	J	220k 1/16W Metal Oxide	AA
R7027	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R7028	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R7029	VRS-CY1JF333FY	J	33k 1/16W Metal Oxide	AA
R7031	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R7032	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R7033	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R7034	VRS-CY1JF331JY	J	330 1/16W Metal Oxide	AA
R7035	VRS-TQ2BD511JY	J	510 1/8W Metal Oxide	AA
R7036	VRS-CY1JF511JY	J	510 1/16W Metal Oxide	AA
R7037	VRS-CY1JF511JY	J	510 1/16W Metal Oxide	AA
R7038	VRS-CY1JF303JY	J	30k 1/16W Metal Oxide	AA
R7040	VRS-CY1JF682FY	J	6.8k 1/16W Metal Oxide	AA
R7041	VRS-CY1JF132FY	J	1.3k 1/16W Metal Oxide	AA
R7042	VRS-CY1JF152FY	J	1.5k 1/16W Metal Oxide	AA
R7051	VRD-RA2HD101JY	J	100 1/2W Carbon (LC-20B9U-S)	AA
R7051	VRD-RM2HD101JY	J	100 1/2W Carbon (LC-20B8U-S,LC-20B9U-SM)	AA
R7052	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R7053	VRS-TQ2BD1R0JY	J	1 1/8W Metal Oxide	AA
R7054	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R7301	VRS-CY1JF104DY	J	100k 1/16W Metal Oxide	AA
R7302	VRS-CY1JF104DY	J	100k 1/16W Metal Oxide	AA
R7303	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA

DUNTKD043FE03 (LC-20B9U-S)
DUNTKD043FM03 (LC-20B9U-SM)
DUNTKD043FM06 (LC-20B8U-S)

POWER Unit (Continued)

Ref. No.	Part No.	★	Description	Code
R7304	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R7305	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R7306	VRS-CY1JF333FY	J	33k 1/16W Metal Oxide	AA
R7307	VRS-CY1JF104FY	J	100k 1/16W Metal Oxide	AA
R7308	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R7309	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R7310	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R7311	VRS-CY1JF331JY	J	330 1/16W Metal Oxide	AA
R7312	VRS-TQ2BD511JY	J	510 1/8W Metal Oxide	AA
R7313	VRS-CY1JF303JY	J	30k 1/16W Metal Oxide	AA
R7334	VRS-CY1JF273JY	J	27k 1/16W Metal Oxide (LC-20B9U-S)	AA
R7335	VRD-RA2BE823JY	J	82k 1/8W Carbon (LC-20B9U-S)	AA
R7336	VRS-CY1JF563JY	J	56k 1/16W Metal Oxide (LC-20B9U-S)	AA
R7703	VRD-RA2EE105JY	J	1M 1/4W Carbon	AA
R7704	RR-DZA033WJZZ	J	180k 3W Special Carbon Film	AD
R7705	RR-DZA033WJZZ	J	180k 3W Special Carbon Film	AD
R7706	RR-DZA036WJZZ	J	150k 2W Special Carbon Film	AC
R7711	VRN-VV3ABR56J	J	0.56 1W Metal Film	AA
R7712	VRN-VV3ABR56J	J	0.56 1W Metal Film	AA
R7713	VRS-TQ2BD101JY	J	100 1/8W Metal Oxide (LC-20B9U-S)	AA
R7714	VRS-TQ2BD000JY	J	0 1/8W Metal Oxide	AA
R7715	VRS-TQ2BD102JY	J	1k 1/8W Metal Oxide	AA
R7716	VRD-RA2HD220JY	J	22 1/2W Carbon (LC-20B9U-S)	AA
R7716	VRD-RM2HD220JY	J	22 1/2W Carbon (LC-20B8U-S,LC-20B9U-SM)	AA
R7717	VRS-TQ2BD102JY	J	1k 1/8W Metal Oxide	AA
R7718	VRS-TQ2BD562JY	J	5.6k 1/8W Metal Oxide	AA
R7719	VRD-RA2HD220JY	J	22 1/2W Carbon (LC-20B9U-S)	AA
R7719	VRD-RM2HD220JY	J	22 1/2W Carbon (LC-20B8U-S,LC-20B9U-SM)	AA
R7720	VRS-TQ2BD222JY	J	2.2k 1/8W Metal Oxide	AA
R7721	VRS-TQ2BD222JY	J	2.2k 1/8W Metal Oxide	AA
⚠ R7722	RR-HZ0048CEZZY	J	3.9M 1/2W Coat-insulated fixed anti-surge	AB
⚠ R7724	RR-HZ0048CEZZY	J	3.9M 1/2W Coat-insulated fixed anti-surge	AB
R7725	VRS-TQ2BD153JY	J	15k 1/8W Metal Oxide	AA
R7728	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R7730	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R7732	VRD-RA2BE000JY	J	0 1/8W Carbon	AA
R7746	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R7748	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R7749	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R7752	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R7755	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R7757	VRS-TQ2BD222JY	J	2.2k 1/8W Metal Oxide	AA
R7759	VRD-RA2HD102JY	J	1k 1/2W Carbon (LC-20B9U-S)	AA
R7759	VRD-RM2HD102JY	J	1k 1/2W Carbon (LC-20B8U-S,LC-20B9U-SM)	AA
R7764	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R7765	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R7766	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R7768	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R7769	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R7770	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R7771	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R7772	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R7773	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R7774	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R7775	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R7776	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R7783	VRS-TQ2BD222JY	J	2.2k 1/8W Metal Oxide	AA
R7784	VRS-CY1JF271JY	J	270 1/16W Metal Oxide (LC-20B8U-S,LC-20B9U-SM)	AA

SWITCHES

S4202	QSW-PA011WJZZ	J	MAIN POWER	AF
SW4202	QSW-K0003AJZZ+	J	CH(Channel)(∨)	AB
SW4203	QSW-K0003AJZZ+	J	CH(Channel)(∧)	AB
SW4204	QSW-K0003AJZZ+	J	INPUT	AB
SW4205	QSW-K0003AJZZ+	J	MENU	AB
SW4206	QSW-K0003AJZZ+	J	VOL(Volume)(+)	AB
SW4207	QSW-K0003AJZZ+	J	VOL(Volume)(–)	AB

MISCELLANEOUS PARTS

⚠ F7701	QFS-ZA006WJZZ+	J	Fuse, 3.15A/250V	AC
FB7001	RBLN-0095CEZZY	J	Ferrite Bead	AD
FB7002	RBLN-0095CEZZY	J	Ferrite Bead	AD
FB7003	RBLN-0095CEZZY	J	Ferrite Bead	AD
FB7004	RBLN-0209TAZZY	J	Ferrite Bead	AB
FB7005	RBLN-0051TAZZY	J	Ferrite Bead	AC
FB7006	RBLN-0254TAZZY	J	Ferrite Bead	AB
FB7007	RBLN-0254TAZZY	J	Ferrite Bead	AB
FB7008	RBLN-0051TAZZY	J	Ferrite Bead	AC
FB7009	RBLN-0209TAZZY	J	Ferrite Bead	AB
FB7702	RBLN-0090GEZZY	J	Ferrite Bead	AB
FB7703	RBLN-0090GEZZY	J	Ferrite Bead	AB
FB7733	RBLN-0090GEZZY	J	Ferrite Bead(LC-20B9U-S)	AB
FB7734	RBLN-0090GEZZY	J	Ferrite Bead	AB
FB7735	RBLN-0090GEZZY	J	Ferrite Bead	AB
FB7736	RBLN-0090GEZZY	J	Ferrite Bead	AB
FB7737	RBLN-0090GEZZY	J	Ferrite Bead (LC-20B8U-S,LC-20B9U-SM)	AB
FB7738	RBLN-0090GEZZY	J	Ferrite Bead (LC-20B8U-S,LC-20B9U-SM)	AB
FB7739	RBLN-0090GEZZY	J	Ferrite Bead (LC-20B8U-S,LC-20B9U-SM)	AB
FB7740	RBLN-0090GEZZY	J	Ferrite Bead (LC-20B8U-S,LC-20B9U-SM)	AB
⚠ CN7701	QSOCAA003WJZZ	J	AC INPUT	AD
P7702	QCNCMA250WJZZ	J	Connector, 23-pin	AE
P7703	QCNCMA012WJZZ	J	Connector, 15-pin	AD
P7704	QPLGZ1938CEZZ	J	Plug, 19-pin	AF
P7705	QPLGN0478GEZZ	J	Plug, 4-pin	AB
SC7701	QSOCZ1938CEZZ	J	Socket, 19-pin	AF
SC7702	QSOCN1695REZZ	J	Socket, 16-pin	AD
HM7701	XG-BM14-30000	J	Screw (LC-20B9U-S)	AA
HM7701	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7702	XG-BM14-30000	J	Screw (LC-20B9U-S)	AA
HM7702	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7703	XG-BM14-30000	J	Screw (LC-20B9U-S)	AA
HM7703	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7704	XG-BM14-30000	J	Screw (LC-20B9U-S)	AA
HM7704	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7705	XG-BM14-30000	J	Screw (LC-20B9U-S)	AA
HM7705	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7706	XG-BM14-30000	J	Screw (LC-20B9U-S)	AA
HM7706	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7707	XG-BM14-30000	J	Screw (LC-20B9U-S)	AA
HM7707	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7708	XG-BM14-30000	J	Screw (LC-20B9U-S)	AA
HM7708	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7709	XG-BM20-30000	J	Screw (LC-20B9U-S)	AA
HM7709	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7710	XG-BM20-30000	J	Screw (LC-20B9U-S)	AA
HM7710	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7711	XG-BM20-30000	J	Screw (LC-20B9U-S)	AA

DUNTKD043FE03 (LC-20B9U-S)
DUNTKD043FM03 (LC-20B9U-SM)
DUNTKD043FM06 (LC-20B8U-S)
POWER Unit (Continued)

Ref. No.	Part No.	★	Description	Code
HM7711	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7712	XG-BM20-30000	J	Screw (LC-20B9U-S)	AA
HM7712	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7713	XG-BM14-30000	J	Screw (LC-20B9U-S)	AA
HM7713	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7714	XG-BM14-30000	J	Screw (LC-20B9U-S)	AA
HM7714	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7715	XG-BM14-30000	J	Screw (LC-20B9U-S)	AA
HM7715	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7716	XG-BM14-30000	J	Screw (LC-20B9U-S)	AA
HM7716	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7717	XG-BM14-30000	J	Screw (LC-20B9U-S)	AA
HM7717	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7718	XG-BM14-30000	J	Screw (LC-20B9U-S)	AA
HM7718	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7719	XG-BM20-30000	J	Screw (LC-20B9U-S)	AA
HM7719	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7720	XG-BM20-30000	J	Screw (LC-20B9U-S)	AA
HM7720	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7721	XG-BM20-30000	J	Screw (LC-20B9U-S)	AA
HM7721	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7722	XG-BM20-30000	J	Screw (LC-20B9U-S)	AA
HM7722	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7723	XG-BM20-30000	J	Screw (LC-20B9U-S)	AA
HM7723	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7724	XG-BM20-30000	J	Screw (LC-20B9U-S)	AA
HM7724	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7725	XG-BM20-30000	J	Screw (LC-20B9U-S)	AA
HM7725	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7726	XG-BM20-30000	J	Screw (LC-20B9U-S)	AA
HM7726	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7727	XG-BM20-30000	J	Screw (LC-20B9U-S)	AA
HM7727	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7728	XG-BM20-30000	J	Screw (LC-20B9U-S)	AA
HM7728	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7740	XG-BM20-30000	J	Screw (LC-20B9U-S)	AA
HM7740	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
HM7741	XG-BM20-30000	J	Screw (LC-20B9U-S)	AA
HM7741	LX-GZ3001PEZZ	J	Screw (LC-20B8U-S,LC-20B9U-SM)	AB
LUG7701	QLUGHA002WJZZ	J	Lug	AB
LUG7702	QLUGHA002WJZZ	J	Lug	AB
LUG7703	QLUGHA002WJZZ	J	Lug	AB
LUG7704	QLUGHA002WJZZ	J	Lug	AB
LUG7705	QLUGHA002WJZZ	J	Lug	AB
RDA7701	PRDARA217WJFW	J	Heat Sink(LC-20B9U-S)	AL
RDA7732	PRDARA218WJFW	J	Heat Sink(LC-20B9U-S)	AM
⚠ SG7701	QSPGCA003WJZZ	J	Spark Gap	AH
	LHLDZA251WJKZ	J	Power Button Holder (LC-20B9U-S)	AD
	LANGTA199WJFW	J	AC Inlet Angle	AD
	LX-BZ3266CEFH	J	Screw, x2	AB
	XBPS730P10JS0	J	Screw, x4	AA

DUNTKD044DE03 (LC-20B9U-S)
DUNTKD044WE03 (LC-20B9U-SM)
DUNTKD044WE06 (LC-20B8U-S)
R/C, LED Unit

INTEGRATED CIRCUITS

IC4001	VHiLM70CiMM-1Y	J	LM70CIMMX-3	AH
IC4002	VHiMM1616++-1Y	J	MM1616XBRE	AF

TRANSISTORS

Q4001	VSDTC114EE/-1Y	J	DTC114EE	AB
Q4003	VSDTC114EE/-1Y	J	DTC114EE	AB
Q4004	VSDTC114EE/-1Y	J	DTC114EE	AB

DIODES

D4001	RH-PX0421CEZZY	J	POWER/WAKE UP TIMER Indicator	AD
D4002	RH-PX0421CEZZY	J	OPC Indicator	AD
D4008	RH-EX1244CEZZY	J	Zener Diode, 5.1V	AB

CAPACITORS

C4001	RC-KZ0117TAZZY	J	4.7	6.3V	Ceramic	AD
C4002	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C4004	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C4005	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4006	VCCCCY1HH221JY	J	220p	50V	Ceramic	AA

RESISTORS

R4001	VRS-CY1JF331JY	J	330	1/16W	Metal Oxide	AA
R4002	VRS-CY1JF182JY	J	1.8k	1/16W	Metal Oxide	AA
R4006	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R4007	VRS-CY1JF331JY	J	330	1/16W	Metal Oxide	AA
R4020	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R4023	VRS-CY1JF000JY	J	0 (LC-20B9U-S)	1/16W	Metal Oxide	AA
R4023	VRS-CY1JF102JY	J	1k (LC-20B8U-S,LC-20B9U-SM)	1/16W	Metal Oxide	AA

MISCELLANEOUS PARTS

FB4001	RBLN-0077TAZZY	J	Ferrite Bead	AB
FB4002	RBLN-0077TAZZY	J	Ferrite Bead	AB
FB4003	RBLN-0077TAZZY	J	Ferrite Bead	AB
J4001	QJAKJ0068CEZZ	J	Headphone Jack (LC-20B9U-S,LC-20B9U-SM)	AG
J4001	QJAKJA008WJSA	J	Headphone Jack (LC-20B8U-S)	AE
SC4001	QSOCN1695REZZ	J	Socket, 16-pin	AD
RMC4001	RRMCUA034WJQZ	J	Remote Receiver	AE

RUNTKA134WJZZ
INVERTER Unit

INTEGRATED CIRCUITS

Ref. No.	Part No.	★	Description	Code
IC6701	9EX1930049000	J	OZ9RRIGN-C-0-T2	AQ

TRANSISTORS

Ref. No.	Part No.	★	Description	Code
Q6703	9EX1333019007	J	2SK3019FTL	AD
Q6705	9EX1331774001	J	2SA1774FTLR	AB
Q6706	9EX1333019007	J	2SK3019FTL	AD
Q6707	9EX1333019007	J	2SK3019FTL	AD
Q6708	9EX1334617003	J	2SC4617FTLR	AB
Q6709	9EX1333019007	J	2SK3019FTL	AD
Q6710	9EX1333019007	J	2SK3019FTL	AD
Q6711	9EX1331774001	J	2SA1774FTLR	AB
Q6714	9EX1333019007	J	2SK3019FTL	AD
Q6715	9EX1333019007	J	2SK3019FTL	AD
Q6716	9EX1333019007	J	2SK3019FTL	AD
Q6717	9EX1334617003	J	2SC4617FTLR	AB
Q6718	9EX1331774001	J	2SA1774FTLR	AB
Q6719	9EX1338206007	J	TPC8206(TE12L,Q)	AH
Q6720	9EX1338206007	J	TPC8206(TE12L,Q)	AH
Q6721	9EX1338206007	J	TPC8206(TE12L,Q)	AH
Q6722	9EX1338206007	J	TPC8206(TE12L,Q)	AH
Q6723	9EX1338206007	J	TPC8206(TE12L,Q)	AH
Q6724	9EX1338206007	J	TPC8206(TE12L,Q)	AH
Q6725	9EX1333019007	J	2SK3019FTL	AD

DIODES

Ref. No.	Part No.	★	Description	Code
D6708	9EX1430017000	J	Diode, 1SS400FTL	AD
D6701	9EX1430016000	J	Diode, DA221FTL	AD
D6702	9EX1430016000	J	Diode, DA221FTL	AD
D6703	9EX1430026000	J	Diode, DAN222	AD
D6704	9EX1430026000	J	Diode, DAN222	AD
D6705	9EX1430016000	J	Diode, DA221FTL	AD
D6706	9EX1430026000	J	Diode, DAN222	AD
D6707	9EX1430016000	J	Diode, DA221FTL	AD
D6710	9EX1430016000	J	Diode, DA221FTL	AD
D6711	9EX1430016000	J	Diode, DA221FTL	AD
D6712	9EX1430026000	J	Diode, DAN222	AD
D6713	9EX1430026000	J	Diode, DAN222	AD
D6714	9EX1430016000	J	Diode, DA221FTL	AD
D6715	9EX1430026000	J	Diode, DAN222	AD

TRANSFORMER

Ref. No.	Part No.	★	Description	Code
⚠ T6701	9EX5030003000	J	Transformer, EEL16S103-T523	AL
⚠ T6702	9EX5030003001	J	Transformer, EEL16S104-T523	AL
⚠ T6703	9EX5030003000	J	Transformer, EEL16S103-T523	AL
⚠ T6704	9EX5030003001	J	Transformer, EEL16S104-T523	AL
⚠ T6705	9EX5030003000	J	Transformer, EEL16S103-T523	AL
⚠ T6706	9EX5030003001	J	Transformer, EEL16S104-T523	AL
⚠ T6707	9EX5030003000	J	Transformer, EEL16S103-T523	AL
⚠ T6708	9EX5030003001	J	Transformer, EEL16S104-T523	AL
⚠ T6709	9EX5030003000	J	Transformer, EEL16S103-T523	AL
⚠ T6710	9EX5030003001	J	Transformer, EEL16S104-T523	AL
⚠ T6711	9EX5030003000	J	Transformer, EEL16S103-T523	AL
⚠ T6712	9EX5030003001	J	Transformer, EEL16S104-T523	AL

CAPACITORS

Ref. No.	Part No.	★			Description	Code
C6701	9EX1194723222	J	4700p	50V	Ceramic	AB
C6702	9EX1131026354	J	1000	16V	Electrolytic	AE
C6703	9EX1131026354	J	1000	16V	Electrolytic	AE
C6704	9EX1194723222	J	4700p	50V	Ceramic	AB
C6705	9EX1191043219	J	0.1	16V	Ceramic	AB
C6706	9EX1191043219	J	0.1	16V	Ceramic	AB
C6707	9EX1191533222	J	0.015	50V	Ceramic	AB
C6708	9EX1191533222	J	0.015	50V	Ceramic	AB
C6709	9EX1131802353	J	18p	6kV	Ceramic	AE
C6710	9EX1194723222	J	4700p	50V	Ceramic	AB
C6711	9EX1194723222	J	4700p	50V	Ceramic	AB
C6712	9EX1131802353	J	18p	6kV	Ceramic	AE
C6713	9EX1131802353	J	18p	6kV	Ceramic	AE
C6714	9EX1194723222	J	4700p	50V	Ceramic	AB
C6715	9EX1194723222	J	4700p	50V	Ceramic	AB
C6716	9EX1131802353	J	18p	6kV	Ceramic	AE
C6721	9EX1131026354	J	1000	16V	Electrolytic	AE
C6722	9EX1191043219	J	0.1	16V	Ceramic	AB
C6723	9EX1191533222	J	0.015	50V	Ceramic	AB
C6724	9EX1131802353	J	18p	6kV	Ceramic	AE
C6725	9EX1194723222	J	4700p	50V	Ceramic	AB
C6726	9EX1194723222	J	4700p	50V	Ceramic	AB
C6727	9EX1131802353	J	18p	6kV	Ceramic	AE
C6730	9EX1191053238	J	1	10V	Ceramic	AB
C6731	9EX1191043219	J	0.1	16V	Ceramic	AB
C6732	9EX1191043219	J	0.1	16V	Ceramic	AB
C6734	9EX1194753237	J	4.7	10V	Ceramic	AB
C6735	9EX1192233222	J	0.022	50V	Ceramic	AB
C6736	9EX1193312235	J	330p	50V	Ceramic	AB
C6738	9EX1192212235	J	220p	50V	Ceramic	AB
C6739	9EX1194753237	J	4.7	10V	Ceramic	AB
C6740	9EX1191033222	J	0.01	50V	Ceramic	AB
C6741	9EX1194723222	J	4700p	50V	Ceramic	AB
C6742	9EX1131026354	J	1000	16V	Electrolytic	AE
C6743	9EX1131026354	J	1000	16V	Electrolytic	AE
C6744	9EX1194723222	J	4700p	50V	Ceramic	AB
C6745	9EX1191043219	J	0.1	16V	Ceramic	AB
C6746	9EX1191043219	J	0.1	16V	Ceramic	AB
C6747	9EX1191533222	J	0.015	50V	Ceramic	AB
C6748	9EX1191533222	J	0.015	50V	Ceramic	AB
C6749	9EX1131802353	J	18p	6kV	Ceramic	AE
C6750	9EX1194723222	J	4700p	50V	Ceramic	AB
C6751	9EX1194723222	J	4700p	50V	Ceramic	AB
C6752	9EX1131802353	J	18p	6kV	Ceramic	AE
C6753	9EX1131802353	J	18p	6kV	Ceramic	AE
C6754	9EX1194723222	J	4700p	50V	Ceramic	AB
C6755	9EX1194723222	J	4700p	50V	Ceramic	AB
C6756	9EX1131802353	J	18p	6kV	Ceramic	AE
C6761	9EX1194723222	J	4700p	50V	Ceramic	AB
C6762	9EX1194723222	J	4700p	50V	Ceramic	AB
C6763	9EX1194723222	J	4700p	50V	Ceramic	AB
C6764	9EX1194723222	J	4700p	50V	Ceramic	AB
C6765	9EX1194723222	J	4700p	50V	Ceramic	AB
C6766	9EX1194723222	J	4700p	50V	Ceramic	AB
C6767	9EX1194723222	J	4700p	50V	Ceramic	AB
C6768	9EX1194723222	J	4700p	50V	Ceramic	AB
C6769	9EX1194723222	J	4700p	50V	Ceramic	AB
C6770	9EX1194723222	J	4700p	50V	Ceramic	AB
C6771	9EX1194723222	J	4700p	50V	Ceramic	AB
C6772	9EX1194723222	J	4700p	50V	Ceramic	AB
C6773	9EX1194723222	J	4700p	50V	Ceramic	AB
C6774	9EX1194723222	J	4700p	50V	Ceramic	AB
C6775	9EX1194723222	J	4700p	50V	Ceramic	AB
C6776	9EX1194723222	J	4700p	50V	Ceramic	AB
C6777	9EX1194723222	J	4700p	50V	Ceramic	AB
C6778	9EX1194723222	J	4700p	50V	Ceramic	AB
C6779	9EX1194723222	J	4700p	50V	Ceramic	AB
C6780	9EX1194723222	J	4700p	50V	Ceramic	AB
C6781	9EX1191043219	J	0.1	16V	Ceramic	AB
C6782	9EX1131026354	J	1000	16V	Electrolytic	AE
C6783	9EX1131802353	J	18p	6kV	Ceramic	AE
C6784	9EX1191533222	J	0.015	50V	Ceramic	AB
C6785	9EX1194723222	J	4700p	50V	Ceramic	AB
C6787	9EX1131802353	J	18p	6kV	Ceramic	AE
C6788	9EX1194723222	J	4700p	50V	Ceramic	AB

RESISTORS

Ref. No.	Part No.	★			Description	Code
R6701	9EX12322ROF12	J	22	1/10W	Carbon	AB
R6702	9EX12322ROF12	J	22	1/10W	Carbon	AB
R6703	9EX12322ROF12	J	22	1/10W	Carbon	AB
R6704	9EX12322ROF12	J	22	1/10W	Carbon	AB
R6705	9EX1235101F01	J	5.1k	1/16W	Carbon	AB
R6706	9EX1235101F01	J	5.1k	1/16W	Carbon	AB
R6707	9EX1237500F01	J	750	1/16W	Carbon	AB
R6708	9EX1237500F01	J	750	1/16W	Carbon	AB
R6709	9EX1232002F01	J	20k	1/16W	Carbon	AB
R6710	9EX1232002F01	J	20k	1/16W	Carbon	AB
R6711	9EX1232002F01	J	20k	1/16W	Carbon	AB
R6712	9EX1232002F01	J	20k	1/16W	Carbon	AB

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INVERTER Unit (Continued)

Ref. No.	Part No.	★	Description			Code
R6713	9EX1232002F01	J	20k	1/16W	Carbon	AB
R6714	9EX1232002F01	J	20k	1/16W	Carbon	AB
R6715	9EX1232002F01	J	20k	1/16W	Carbon	AB
R6716	9EX1232002F01	J	20k	1/16W	Carbon	AB
R6717	9EX1235101F01	J	5.1k	1/16W	Carbon	AB
R6718	9EX1237500F01	J	750	1/16W	Carbon	AB
R6719	9EX1232002F01	J	20k	1/16W	Carbon	AB
R6720	9EX1232002F01	J	20k	1/16W	Carbon	AB
R6721	9EX1232002F01	J	20k	1/16W	Carbon	AB
R6722	9EX1232002F01	J	20k	1/16W	Carbon	AB
R6723	9EX1232253208	J	2.2M	1/10W	Carbon	AB
R6724	9EX1232002F01	J	20k	1/16W	Carbon	AB
R6725	9EX1231502F01	J	15k	1/16W	Carbon	AB
R6726	9EX1231033208	J	10k	1/10W	Carbon	AB
R6727	9EX1230003206	J	0	1/4W	Carbon	AB
R6728	9EX1231004F01	J	1M	1/16W	Carbon	AB
R6729	9EX1231033208	J	10k	1/10W	Carbon	AB
R6730	9EX1231033208	J	10k	1/10W	Carbon	AB
R6732	9EX1237523208	J	7.5k	1/10W	Carbon	AB
R6734	9EX1231033208	J	10k	1/10W	Carbon	AB
R6735	9EX1231033208	J	10k	1/10W	Carbon	AB
R6736	9EX1231033208	J	10k	1/10W	Carbon	AB
R6737	9EX1231033208	J	10k	1/10W	Carbon	AB
R6738	9EX1231003208	J	10	1/10W	Carbon	AB
R6740	9EX1236223208	J	6.2k	1/10W	Carbon	AB
R6741	9EX1231063208	J	10M	1/10W	Carbon	AB
R6742	9EX1233353208	J	3.3M	1/10W	Carbon	AB
R6743	9EX1238203F01	J	820k	1/16W	Carbon	AB
R6744	9EX1231004F01	J	1M	1/16W	Carbon	AB
R6745	9EX1231003208	J	10	1/10W	Carbon	AB
R6746	9EX1231003208	J	10	1/10W	Carbon	AB
R6747	9EX1230003206	J	0	1/4W	Carbon	AB
R6748	9EX12322ROF12	J	22	1/10W	Carbon	AB
R6749	9EX12322ROF12	J	22	1/10W	Carbon	AB
R6751	9EX12322ROF12	J	22	1/10W	Carbon	AB
R6752	9EX12322ROF12	J	22	1/10W	Carbon	AB
R6753	9EX1235101F01	J	5.1k	1/16W	Carbon	AB
R6754	9EX1235101F01	J	5.1k	1/16W	Carbon	AB
R6755	9EX1237500F01	J	750	1/16W	Carbon	AB
R6756	9EX1237500F01	J	750	1/16W	Carbon	AB
R6757	9EX1232002F01	J	20k	1/16W	Carbon	AB
R6758	9EX1232002F01	J	20k	1/16W	Carbon	AB
R6759	9EX1232002F01	J	20k	1/16W	Carbon	AB
R6760	9EX1232002F01	J	20k	1/16W	Carbon	AB
R6761	9EX1232002F01	J	20k	1/16W	Carbon	AB
R6762	9EX1232002F01	J	20k	1/16W	Carbon	AB
R6763	9EX1232002F01	J	20k	1/16W	Carbon	AB
R6764	9EX1232002F01	J	20k	1/16W	Carbon	AB
R6765	9EX1231003208	J	10	1/10W	Carbon	AB
R6766	9EX1231003208	J	10	1/10W	Carbon	AB
R6769	9EX12322ROF12	J	22	1/10W	Carbon	AB
R6770	9EX1237500F01	J	750	1/16W	Carbon	AB
R6771	9EX1230003208	J	0	1/10W	Carbon	AB
R6773	9EX1230003206	J	0	1/4W	Carbon	AB
R6774	9EX1230003208	J	0	1/10W	Carbon	AB
R6775	9EX1230003208	J	0	1/10W	Carbon	AB
R6776	9EX12322ROF12	J	22	1/10W	Carbon	AB
R6777	9EX12322ROF12	J	22	1/10W	Carbon	AB
R6778	9EX1234301F01	J	4.3k	1/16W	Carbon	AB
R6780	9EX12322ROF12	J	22	1/10W	Carbon	AB
R6781	9EX1231033208	J	10k	1/10W	Carbon	AB
R6782	9EX1231033208	J	10k	1/10W	Carbon	AB
R6783	9EX1231033208	J	10k	1/10W	Carbon	AB
R6785	9EX1230003206	J	0	1/4W	Carbon	AB
R6786	9EX1231033208	J	10k	1/10W	Carbon	AB
R6787	9EX1230003206	J	0	1/4W	Carbon	AB
R6788	9EX1230003206	J	0	1/4W	Carbon	AB
R6790	9EX1230003206	J	0	1/4W	Carbon	AB
R6791	9EX1230003206	J	0	1/4W	Carbon	AB
R6792	9EX1230003206	J	0	1/4W	Carbon	AB
R6793	9EX1230003206	J	0	1/4W	Carbon	AB
R6794	9EX1230003206	J	0	1/4W	Carbon	AB
R6795	9EX1230003208	J	0	1/10W	Carbon	AB
R6796	9EX1230003208	J	0	1/10W	Carbon	AB
R6797	9EX1230003208	J	0	1/10W	Carbon	AB
R6798	9EX1230003208	J	0	1/10W	Carbon	AB
R6801	9EX1230003208	J	0	1/10W	Carbon	AB
R6803	9EX1230003208	J	0	1/10W	Carbon	AB
R6806	9EX1230003208	J	0	1/10W	Carbon	AB
R6807	9EX1233353208	J	3.3M	1/10W	Carbon	AB
R6808	9EX1230003206	J	0	1/4W	Carbon	AB
R6809	9EX1230003208	J	0	1/10W	Carbon	AB
R6811	9EX1230003208	J	0	1/10W	Carbon	AB
R6814	9EX1231003208	J	10	1/10W	Carbon	AB
R6815	9EX1230003206	J	0	1/4W	Carbon	AB
R6816	9EX1230003206	J	0	1/4W	Carbon	AB
R6817	9EX1230003206	J	0	1/4W	Carbon	AB
R6818	9EX1230003206	J	0	1/4W	Carbon	AB
R6825	9EX12322ROF12	J	22	1/10W	Carbon	AB
R6826	9EX12322ROF12	J	22	1/10W	Carbon	AB
R6830	9EX1230003208	J	0	1/10W	Carbon	AB
R6833	9EX1230003208	J	0	1/10W	Carbon	AB
R6838	9EX1230003208	J	0	1/10W	Carbon	AB
R6842	9EX1230003208	J	0	1/10W	Carbon	AB
R6846	9EX1230003208	J	0	1/10W	Carbon	AB
R6847	9EX1230003206	J	0	1/4W	Carbon	AB
R6849	9EX1231003208	J	10	1/10W	Carbon	AB
R6850	9EX1231003208	J	10	1/10W	Carbon	AB
R6851	9EX1231003208	J	10	1/10W	Carbon	AB
R6852	9EX12322ROF12	J	22	1/10W	Carbon	AB
R6853	9EX1231003208	J	10	1/10W	Carbon	AB
R6854	9EX12322ROF12	J	22	1/10W	Carbon	AB
R6855	9EX12322ROF12	J	22	1/10W	Carbon	AB
R6856	9EX12322ROF12	J	22	1/10W	Carbon	AB
R6857	9EX1231003208	J	10	1/10W	Carbon	AB
R6858	9EX12322ROF12	J	22	1/10W	Carbon	AB
R6859	9EX12322ROF12	J	22	1/10W	Carbon	AB
R6860	9EX12322ROF12	J	22	1/10W	Carbon	AB
R6862	9EX12322ROF12	J	22	1/10W	Carbon	AB
R6863	9EX12322ROF12	J	22	1/10W	Carbon	AB
R6867	9EX1235101F01	J	5.1k	1/16W	Carbon	AB
R6868	9EX1237500F01	J	750	1/16W	Carbon	AB
R6869	9EX1232002F01	J	20k	1/16W	Carbon	AB
R6870	9EX1232002F01	J	20k	1/16W	Carbon	AB
R6871	9EX1231003208	J	10	1/10W	Carbon	AB
R6872	9EX1231003208	J	10	1/10W	Carbon	AB
R6876	9EX1232002F01	J	20k	1/16W	Carbon	AB
R6877	9EX1232002F01	J	20k	1/16W	Carbon	AB
R6878	9EX12322ROF12	J	22	1/10W	Carbon	AB
R6886	9EX1230003208	J	0	1/10W	Carbon	AB

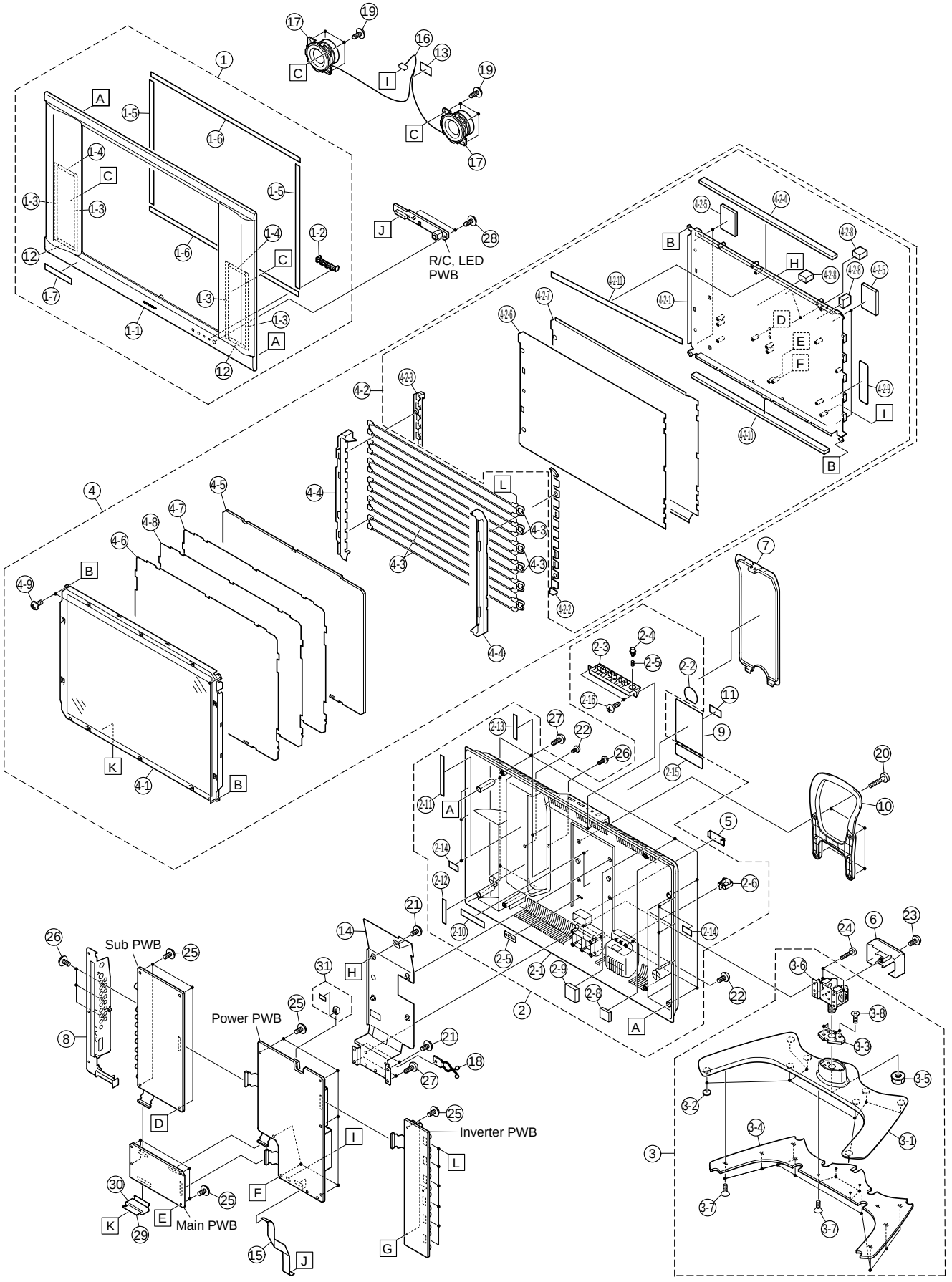
MISCELLANEOUS PARTS

Ref. No.	Part No.	★	Description	Code
⚠ F6701	9EX9930098000	J	Fuse, 6.3A/250V	AD
P6701	9EX9930112219	J	Connector, 19-pin	AF
P6702	9EX9930113202	J	Connector, 2-pin	AF
P6703	9EX9930113202	J	Connector, 2-pin	AF
P6704	9EX9930113202	J	Connector, 2-pin	AF
P6705	9EX9930113202	J	Connector, 2-pin	AF
P6706	9EX9930113202	J	Connector, 2-pin	AF
P6707	9EX9930113202	J	Connector, 2-pin	AF
LUG6701	9EX9930110000	J	Lug	AC
LUG6702	9EX9930110000	J	Lug	AC

CABINET AND MECHANICAL PARTS
(LC-20B8U-S,LC-20B9U-SM)

Ref. No.	Part No.	★	Description	Code
1	CCABAA890WJ03	X	Cabinet A Ass'y (LC-20B8U-S)	BG
1	CCABAA890WJ02	X	Cabinet A Ass'y (LC-20B9U-SM)	
1-1	*Not Available*	–	Cabinet A	—
1-2	HDECQA346WJSA	J	R/C, LED Cover	AE
1-3	PSPAGA216WJZZ	J	SP Spacer(L), x4	AC
1-4	PSPAGA217WJZZ	J	SP Spacer(S), x2	AB
1-5	PSPAHA391WJZZ	J	Mask Spacer(S), x2	AC
1-6	PSPAHA392WJZZ	J	Mask Spacer(L), x2	AC
1-7	TLABZA635WJZZ	J	"Energy Star" Label	AC
2	CCABBA559WJ02	X	Cabinet B Ass'y	BS
2-1	*Not Available*	–	Cabinet B	—
2-2	HiNDP5733CESB	J	Brand Indication Label	AD
2-3	JBTN-A444WJKA	J	Operation Button	AK
2-4	JBTN-A456WJKA	J	Power Button	AD
2-5	MSPRCA015WJFW	J	Spring, for Power Button	AB
2-6	LANGFA085WJFW	J	Kensington Angle, x1	AC
2-7	LHLDWA055WJKZ	J	Wire Holder, x1	AC
2-8	PMLT-A098WJZZ	J	Light Shielding Spacer, x1	AC
2-9	PMLT-A221WJZZ	X	Light Shielding Spacer, x1	
2-10	PSPAHA589WJZZ	X	Spacer, x2	
2-11	PSPAHA590WJZZ	X	Spacer, x1	
2-12	PSPAHA591WJZZ	X	Spacer, x1	
2-13	PSPAHA592WJZZ	X	Spacer, x2	
2-14	PSPAHA593WJZZ	X	Spacer, x6	
2-15	TCAUHA044WJSB	X	Caution Label	
2-16	XEBSN30P08000	J	Screw, x2	AA
3	CDAi-A199WJ02	J	Stand Ass'y (LC-20B9U-SM)	BN
3	CDAi-A199WJ03	X	Stand Ass'y (LC-20B8U-S)	
3-1	GDAi-A199WJKA	J	Stand Base (LC-20B8U-S)	BA
3-1	GDAi-A199WJKB	J	Stand Base (LC-20B9U-SM)	BA
3-2	GLEGGA025WJZZ	J	Rubber Leg, x8	AB
3-3	LANGGA059WJF7	X	Swivel Base	
3-4	LANGKA499WJSA	J	Base Angle	AX
3-5	LX-NZA001WJFN	J	Nut, x1	AD
3-6	MHNG-A091WJ01	J	Swivel Hinge	BA
3-7	XESSN40P10000	J	Screw, x10	AB
3-8	XUSSN40P20000	J	Screw, x4	AA
4	*Not Available*	–	20" LCD Panel Unit Ass'y	—
4-1	RLCDTA031WJZZ	J	20" LCD Panel Unit	DC
4-2	*Not Available*	–	Back Shield Ass'y	—
4-2-1	PSLDMA653WJFW	J	Back Shield	BA
4-2-2	LHLDZA367WJKZ	J	Lamp Holder (Bottom)-Right	AH
4-2-3	LHLDZA368WJKZ	J	Lamp Holder (Bottom)-Left	AH
4-2-4	PMLT-A078WJZZ	J	Light Shielding Sheet, x1	AE
4-2-5	PMLT-A098WJZZ	J	Light Shielding Sheet, x4	AC
4-2-6	PSHEPA205WJZZ	J	Reflection Sheet (Top)	AL
4-2-7	PSHEPA206WJZZ	J	Reflection Sheet (Bottom)	AL
4-2-8	PSPAGA285WJZZ	J	Spacer, x4	AC
4-2-9	TCAUZA031WJZZ	J	Caution Label	AB
4-2-10	PMLT-A225WJZZ	J	Light Shielding Sheet, x1	AD
4-2-11	PSPAGA291WJZZ	J	Spacer, x1	AD
⚠ 4-3	KLMP-A034WJZZ	J	Lamp Unit, x6	AX
4-4	LHLDZA365WJKZ	J	Lamp Holder (Top), x2	AL
4-5	PCOVUA035WJZZ	J	Diffusion Plate	AY
4-6	PSHEPA203WJZZ	J	Prism Sheet (H)	BB
4-7	PSHEPA204WJZZ	J	Diffusion Sheet	AM
4-8	PSHEPA208WJZZ	J	Prism Sheet (V)	BB
4-9	XBPS726P05J00	J	Screw, x3	AA
5	GCOVAA659WJKB	J	Bass-Conne Cover	AE
6	GCOVAB082WJKA	J	Stand Cover (LC-20B8U-S)	AK
6	GCOVAB082WJKB	J	Stand Cover (LC-20B9U-SM)	AK
7	GCOVAB202WJKA	J	Terminal Cover	AM
8	LCHSMA193WJKA	X	Chassis Frame	AM
9	HiNDPB274WJSA	X	Model Label (LC-20B9U-SM)	
9	HiNDPB275WJSA	X	Model Label (LC-20B8U-S)	AG
10	JHNDPA017WJKA	J	Carrying Handle	AL
11	*Not Available*	–	Serial No. Label	—
12	PSPAGA217WJZZ	J	SP Spacer(S), x2	AB
13	PSPAHA347WJZZ	J	Spacer, x1	AB
14	LANGTA184WJFW	J	Reinforcement Angle	AU
15	QCNW-D403WJQZ	X	Connecting Cord	AF
16	QCNW-D404WJQZ	X	Connecting Cord	AG
17	VSP0050PBQ48S	J	Speaker, x2	AP
18	LHLDW1046CEZZ	J	Wire Holder, x1	AA
19	XEBSN40P10000	J	Screw, x8	AB
20	LX-BZ3442CEF9	J	Screw, x4	AB
21	XBBS740P06000	J	Screw, x3	AA
22	XBBS930P05000	J	Screw, x3	AA
23	XBBS940P08000	J	Screw, x1	AB
24	XBBS940P25000	J	Screw, x4	AB
25	XBPS730P06JS0	J	Screw, x17	AA
26	XEBS930P08000	J	Screw, x4	AA
27	XEBS940P16000	J	Screw, x11	AB
28	XEBSN30P08000	J	Screw, x2	AA
29	QPWBHC584WJPZ	J	Connecting Cord	AL
30	RCORFA032WJZZ	J	Ferrite Core, x1	AK
31	LHLDZA251WJKZ	J	Power Button Holder	AD

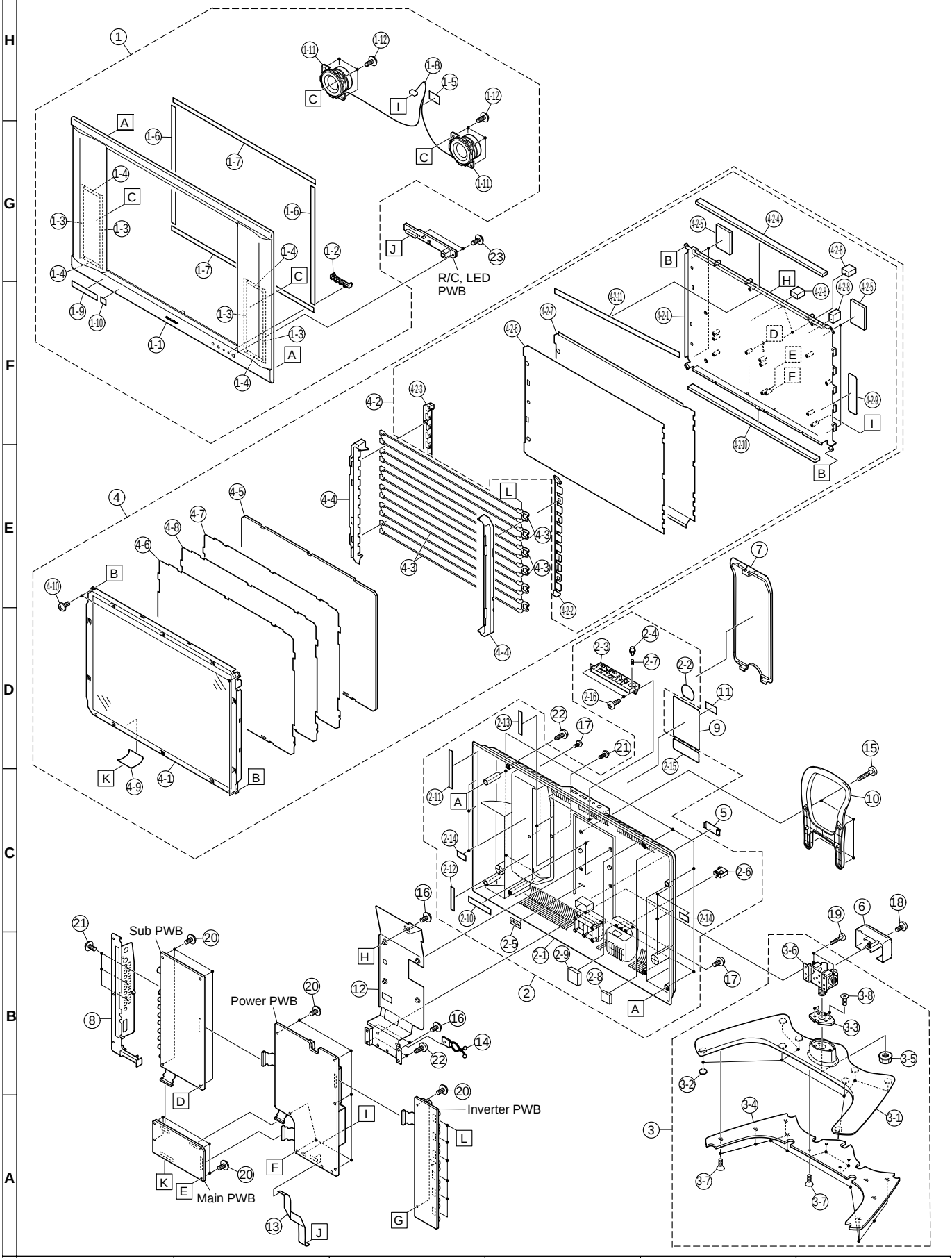
CABINET AND MECHANICAL PARTS (LC-20B8U-S,LC-20B9U-SM)



CABINET AND MECHANICAL PARTS
(LC-20B9U-S)

Ref. No.	Part No.	★	Description	Code
1	CCABAA890WJ01	J	Cabinet A Ass'y	BK
1-1	*Not Available*	–	Cabinet A	—
1-2	HDECQA346WJSA	J	R/C, LED Cover	AE
1-3	PSPAGA216WJZZ	J	SP Spacer(L), x4	AC
1-4	PSPAGA217WJZZ	J	SP Spacer(S), x4	AB
1-5	PSPAHA347WJZZ	J	Spacer, x1	AB
1-6	PSPAHA391WJZZ	J	Mask Spacer(S), x2	AC
1-7	PSPAHA392WJZZ	J	Mask Spacer(L), x2	AC
1-8	QCNW-D404WJQZ	J	Connecting Cord	AG
1-9	TLABZA635WJZZ	J	"Energy Star" Label	AC
1-10	TLABZA676WJZZ	J	"POP" Label	AC
1-11	VSP0050PBQ48S	J	Speaker, x2	AP
1-12	XEBSN40P10000	J	Screw, x8	AB
2	CCABBA559WJ01	J	Cabinet B Ass'y	BD
2-1	*Not Available*	–	Cabinet B	—
2-2	HiNDP5733CESB	J	Brand Indication Label	AD
2-3	JBTN-A444WJKA	J	Operation Button	AK
2-4	JBTN-A456WJKA	J	Power Button	AD
2-5	LANGFA085WJFW	J	Kensington Angle, x1	AC
2-6	LHLDWA055WJKZ	J	Wire Holder, x1	AC
2-7	MSPRCA015WJFW	J	Spring, for Power Button	AB
2-8	PMLT-A098WJZZ	J	Light Shielding Spacer, x1	AC
2-9	PMLT-A221WJZZ	J	Light Shielding Spacer, x1	AC
2-10	PSPAHA589WJZZ	J	Spacer x2	AB
2-11	PSPAHA590WJZZ	J	Spacer, x1	AC
2-12	PSPAHA591WJZZ	J	Spacer x1	AC
2-13	PSPAHA592WJZZ	J	Spacer, x2	AB
2-14	PSPAHA593WJZZ	J	Spacer, x6	AB
2-15	TCAUHA044WJSB	J	Caution Label	
2-16	XEBSN30P08000	J	Screw, x2	AA
3	CDAi-A199WJ02	J	Stand Ass'y	BN
3-1	GDAi-A199WJKB	J	Stand Base	BA
3-2	GLEGGA025WJZZ	J	Rubber Leg, x8	AB
3-3	LANGGA059WJF7	J	Swivel Base	
3-4	LANGKA499WJSA	J	Base Angle	AX
3-5	LX-NZA001WJFN	J	Nut, x1	AD
3-6	MHNG-A091WJ01	J	Swivel Hinge	BA
3-7	XESSN40P10000	J	Screw, x10	AB
3-8	XUSSN40P20000	J	Screw, x4	AA
4	*Not Available*	–	20" LCD Panel Unit Ass'y	—
4-1	RLCDTA031WJZZ	J	20" LCD Panel Unit	DC
4-2	*Not Available*	–	Back Shield Ass'y	—
4-2-1	PSLDMA653WJFW	J	Back Shield	BA
4-2-2	LHLDZA367WJKZ	J	Lamp Holder (Bottom)-Right	AH
4-2-3	LHLDZA368WJKZ	J	Lamp Holder (Bottom)-Left	AH
4-2-4	PMLT-A078WJZZ	J	Light Shielding Sheet, x1	AE
4-2-5	PMLT-A098WJZZ	J	Light Shielding Sheet, x4	AC
4-2-6	PSHEPA205WJZZ	J	Reflection Sheet (Top)	AL
4-2-7	PSHEPA206WJZZ	J	Reflection Sheet (Bottom)	AL
4-2-8	PSPAGA285WJZZ	J	Spacer, x4	AC
4-2-9	TCAUZA031WJZZ	J	Caution Label	AB
4-2-10	PMLT-A225WJZZ	J	Light Shielding Sheet, x1	AD
4-2-11	PSPAGA291WJZZ	J	Spacer, x1	AD
⚠ 4-3	KLMP-A034WJZZ	J	Lamp Unit, x6	AX
4-4	LHLDZA365WJKZ	J	Lamp Holder (Top), x2	AL
4-5	PCOVUA035WJZZ	J	Diffusion Plate	AY
4-6	PSHEPA203WJZZ	J	Prism Sheet (H)	BB
4-7	PSHEPA204WJZZ	J	Diffusion Sheet	AM
4-8	PSHEPA208WJZZ	J	Prism Sheet (V)	BB
4-9	QPWBHC584WJPZ	J	Connecting Cord	AL
4-10	XBPS726P05J00	J	Screw, x3	AA
5	GCOVAA659WJKB	J	Bass-Conne Cover	AE
6	GCOVAB082WJKB	J	Stand Cover	AK
7	GCOVAB202WJKA	J	Terminal Cover	AM
8	LCHSMA193WJKA	J	Chassis Frame	AL
9	HiNDPB272WJSA	J	Model Label	AG
10	JHNDPA017WJKA	J	Carrying Handle	AL
11	*Not Available*	–	Serial No. Label	—
12	LANGTA184WJFW	J	Reinforcement Angle	AU
13	QCNW-D403WJQZ	J	Connecting Cord	AF
14	LHLDW1046CEZZ	J	Wire Holder, x1	AA
15	LX-BZ3442CEF9	J	Screw, x4	AB
16	XBBS740P06000	J	Screw, x3	AA
17	XBBS930P05000	J	Screw, x3	AA
18	XBBS940P08000	J	Screw, x1	AB
19	XBBS940P25000	J	Screw, x4	AB
20	XBPS730P06JS0	J	Screw, x17	AA
21	XEBS930P08000	J	Screw, x4	AA
22	XEBS940P16000	J	Screw, x11	AB
23	XEBSN30P08000	J	Screw, x2	AA

CABINET AND MECHANICAL PARTS (LC-20B9U-S)



Ref. No.	Part No.	★	Description	Code

SUPPLIED ACCESORIES

X1	LHLDWA002WJSA	J	Cable Clamp, x1 (LC-20B8U-S)	AD
X1	LHLDWA002WJSB	J	Cable Clamp, x1 (LC-20B9U-S,LC-20B9U-SM)	AD
⚠ X2	QACCDA038WJPZ	J	AC Cord	AL
X3	QCNWGA050WJPZ	J	RGB Cable	AR
X4	RRMCGA293WJSA	J	Wireless Remote Control (LC-20B8U-S)	AT
X4	RRMCGA293WJSB	J	Wireless Remote Control (LC-20B9U-S,LC-20B9U-SM)	AT
X5	TCADEA028WJN1	J	Questionnaire Card (LC-20B9U-S)	AD
X5	TCADEA126WJZZ	X	Questionnaire Card (LC-20B8U-S,LC-20B9U-SM)	AC
X6	TiNS-B737WJZZ	J	Operation Manual (LC-20B9U-S)	AR
X6	TiNS-B773WJZZ	X	Operation Manual (LC-20B9U-SM)	
X6	TiNS-B774WJZZ	X	Operation Manual (LC-20B8U-S)	AX
X7	*Not Available*	–	"AAA" size Battery, x2	—

SERVICE JIGS
(USE FOR SERVICING)

QCNW-C458WJQZ	J	Extension Cable 80-pin (SC1201-LCD)	AM
QCNW-C460WJQZ	J	Extension Cable 19-pin (SC7701-P6701)	AX
QCNW-C461WJQZ	J	Extension Cable 15-pin (SC2003-P7703)	CD
QCNW-D402WJQZ	J	Extension Cable 23-pin, x2 (SC2001-P3401) (SC2004-P7704)	CE

PACKING PARTS
(NOT REPLACEMENT ITEM)

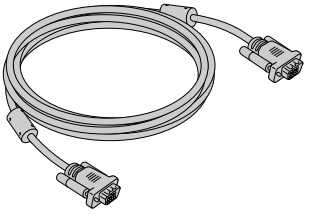
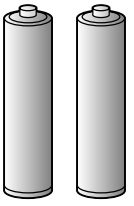
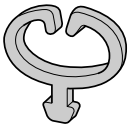
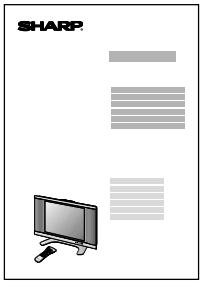
LC-20B8U-S,LC-20B9U-SM

S1	SPAKCB904WJZZ	–	Packing Case(LC-20B9U-SM)	—
S1	SPAKCB905WJZZ	–	Packing Case(LC-20B8U-S)	—
S2	SPAKFA791WJZZ	–	Packing Material (Accessories)	—
S3	SPAKFA793WJZZ	–	Packing Material (Partition)	—
S4	SPAKPA476WJZZ	–	Wrapping Paper	—
S5	SPAKXA743WJZZ	–	Buffer Material	—
S6	SSAKA0101GJZZ	–	Polyethylene Bag	—
S7	TLABKA009WJZZ	–	Case No. Label	—

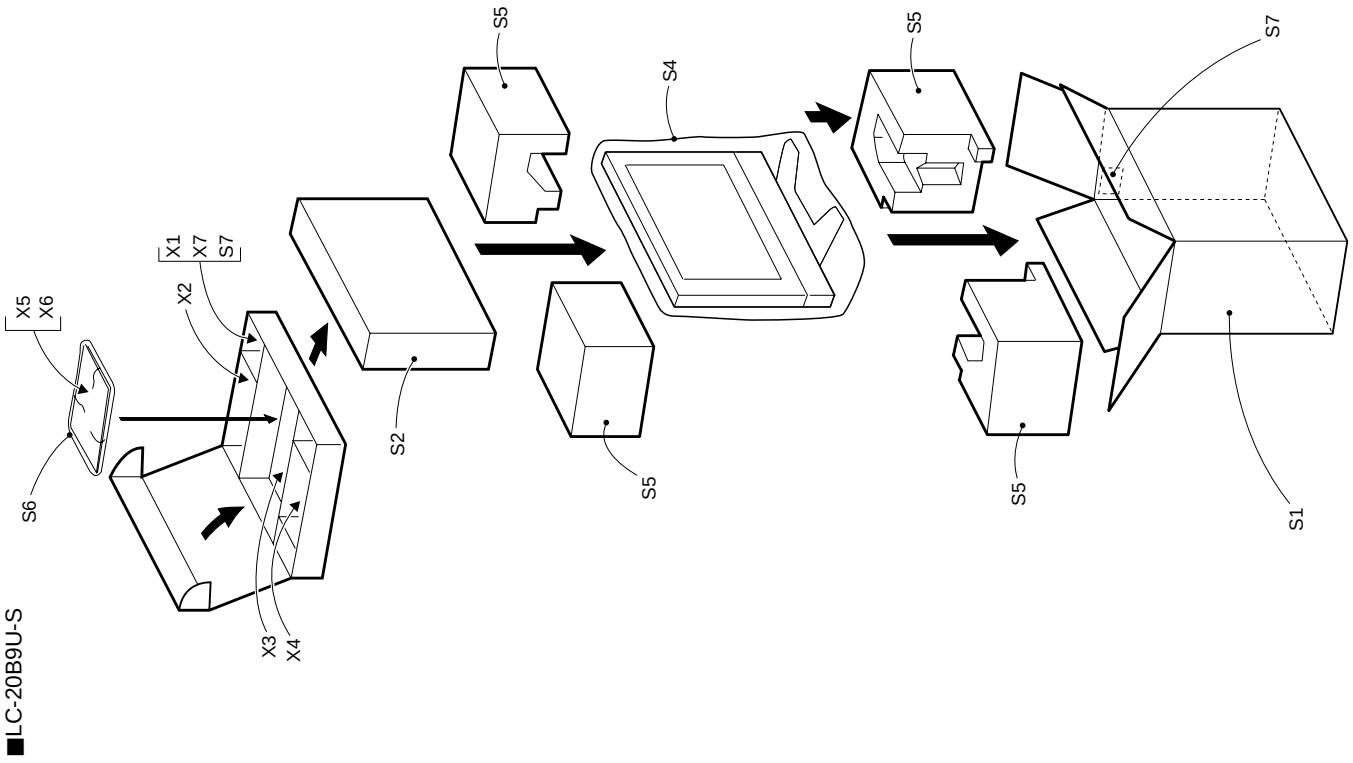
LC-20B9U-S

S1	SPAKCB902WJZZ	–	Packing Case	—
S2	SPAKFA760WJZZ	–	Packing Material (Accessories)	—
S4	SPAKPA508WJZZ	–	Wrapping Paper	—
S5	SPAKXA743WJZZ	–	Buffer Material	—
S6	SSAKA0170CEZZ	–	Polyethylene Bag	—
S7	SSAKA0219CEZZ	–	Polyethylene Bag	—
S8	TLABK0001TAZZ	–	No. Label	—

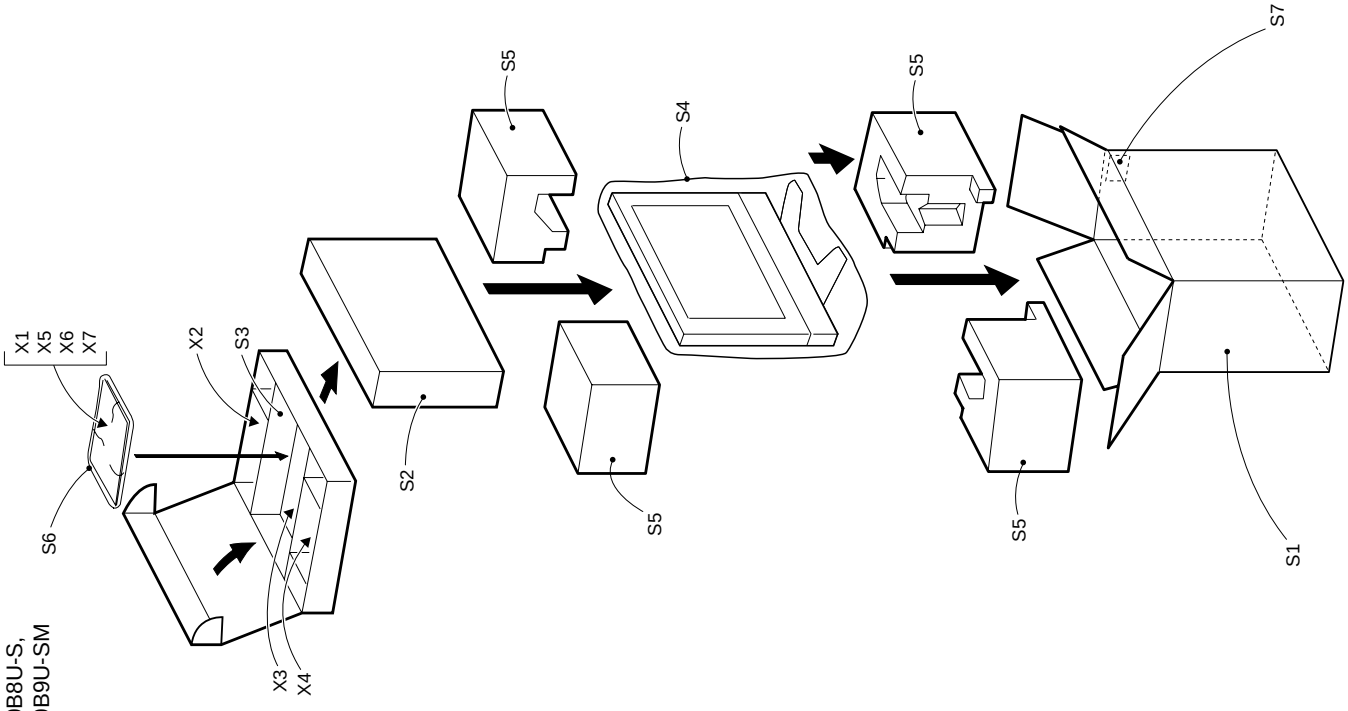
Supplied Accessories

Wireless remote control	AC cord	RGB cable
X4	X2	X3 
"AAA" size batteries (x2)	**Cable clamp**	**Operation manual**
X7 	X1 	X6 

PACKING OF THE SET



■LC-20B9U-S



■LC-20B8U-S,
LC-20B9U-SM

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